THE ADHD JOURNEY: ACROSS THE LIFE SPAN

BY: CHELLSEA SPARKS M.A., LPC-ASSOCIATE

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"THE CRUX OF THE ADHD JOURNEY HAS MUCH TO DO WITH LETTING GO OF THE FALSE BELIEF YOU HAVE ABOUT YOURSELF AS IT DOES WITH ADDING TOOLS AND STRATEGIES." –A RADICAL GUIDE FOR WOMEN WITH ADHD BY SARI SALDEN AND MICHELLE FRANK

INTRODUCTION

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OUTLINE

1. What is ADHD, the diagnosis, the three different types, DSM-5 tr (diagnostics).
How ADHD works in the brain & Differential Diagnosis "SCT"
2. Executive Functioning in the ADHD Brain- What/Where/How/Why
3. Treatment of ADHD:
- **Medication management**
- **Layers of skills**
- **Addressing Shame/Cognitive Beliefs**
- **ADHD Specific CBT/ADDRESSING COMORBID ISSUES**

4. Testing of ADHD- Brown EF/A & D-REFT
5. ADHD in Children-counseling approaches/treatment planning
6. ADHD in Adolescents- counseling approaches/treatment planning
7. ADHD in Adults-counseling approaches/treatment planning
8. Books, Resources, and Reliable Sources of Information.

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WHAT IS ATTENTION DEFICIT-HYPERACTIVITY DISORDER?

ADHD is a neurodevelopmental disorder that affects executive functioning.

There is three different times of ADHD. These include:

- Predominantly Inattentive
- Predominantly Hyperactive
- Combo Type

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PREDOMINANTLY INATTENTIVE:

(6 OR MORE SYMPTOMS FOR CHILDREN IN THE LAST SIX MONTHS & 5 OR MORE SYMPTOMS IN THE LAST SIX MONTHS FOR AGES 17 AND OLDER.)

- Often fails to give close attention to details or make careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).
- Often has difficulty sustaining attention in tasks or play activities (e.g., difficulty remaining focused during lectures, conversations, or lengthy reading).
- Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).

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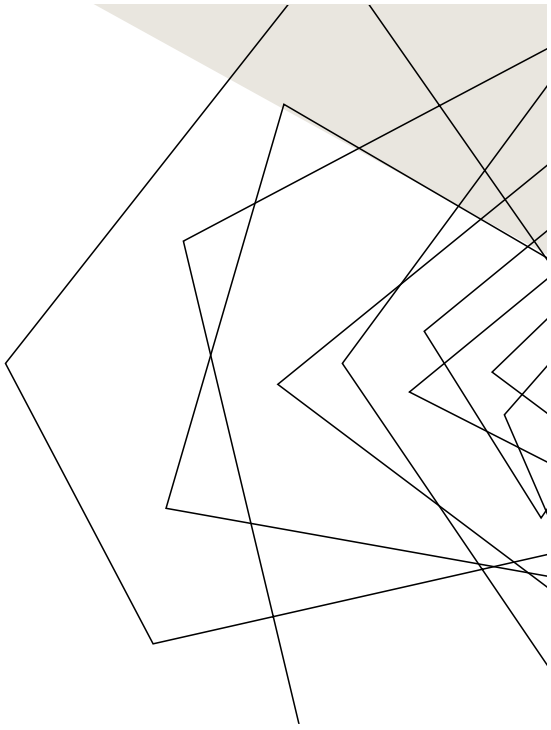

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PREDOMINANTLY INATTENTIVE CONTINUED:

- Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengths papers).
- Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
- Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).
- Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, and keeping appointments).

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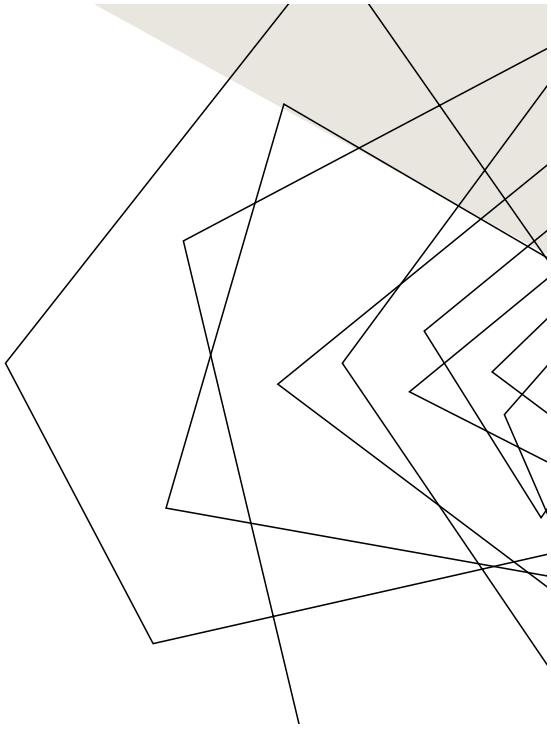

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PREDOMINANTLY HYPERACTIVITY & IMPULSIVITY:

(6 OR MORE SYMPTOMS FOR CHILDREN IN THE LAST SIX MONTHS & 5 OR MORE SYMPTOMS IN THE LAST SIX MONTHS FOR AGES 17 AND OLDER.)

- Often fidgets with or taps hands or feet or squirms in seat.
- Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
- Often runs about or climbs in situations where it is inappropriate **(NOTE:** In adolescents or adults, may be limited to feeling restless).
- Often is unable to play or engage in leisure activities quietly.
- Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings' may be experienced by others as being restless or difficulty to keep up with).

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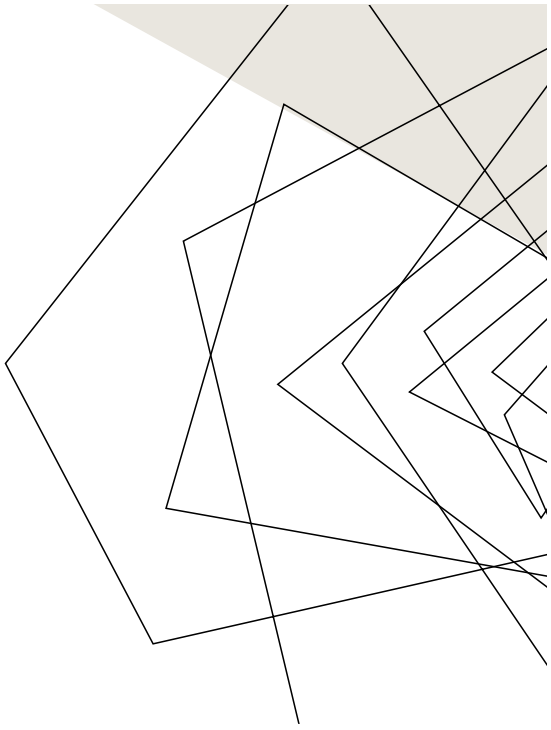

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PREDOMINANTLY HYPERACTIVITY & IMPULSIVITY CONTINUED:

- Often talks excessively
- Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
- Often has difficulty waiting his or her turn (e.g., while waiting in line).
- Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing.

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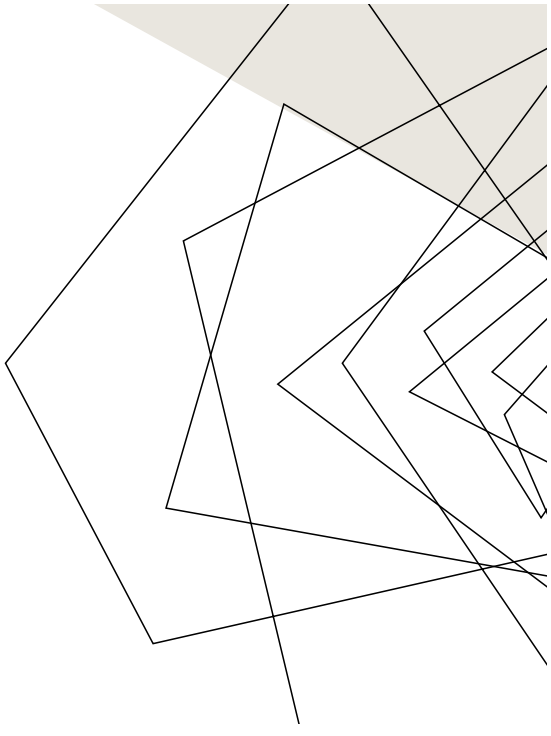

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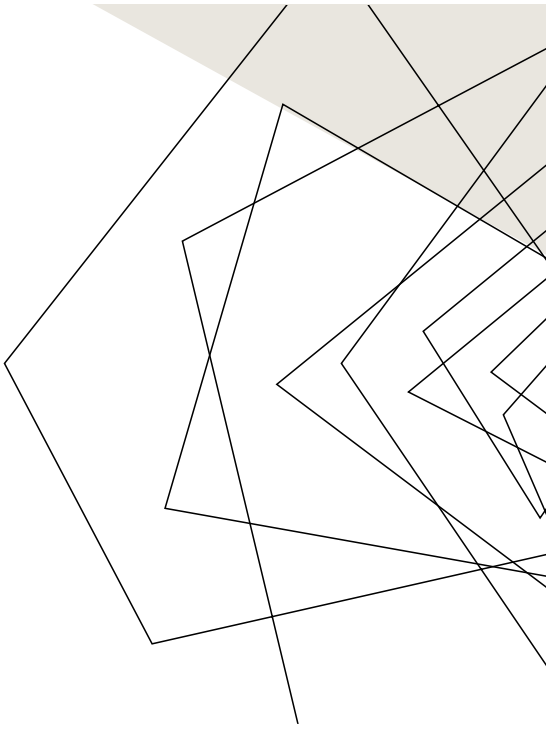
COMBINED PRESENTATION:

- If both the criteria for inattention & hyperactivity/impulsivity are met for the past 6 months.
- Several symptoms inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.
- Several Inattentive or hyperactive-impulsive are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).
- There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.
- The symptoms do not occur exclusively during the course of schizophrenia or another psychotic disorder and are not better explained by another mental disorder (e.g., mood disorder, anxiety disorder, dissociative disorder, personality disorder, substance intoxication or withdrawal).



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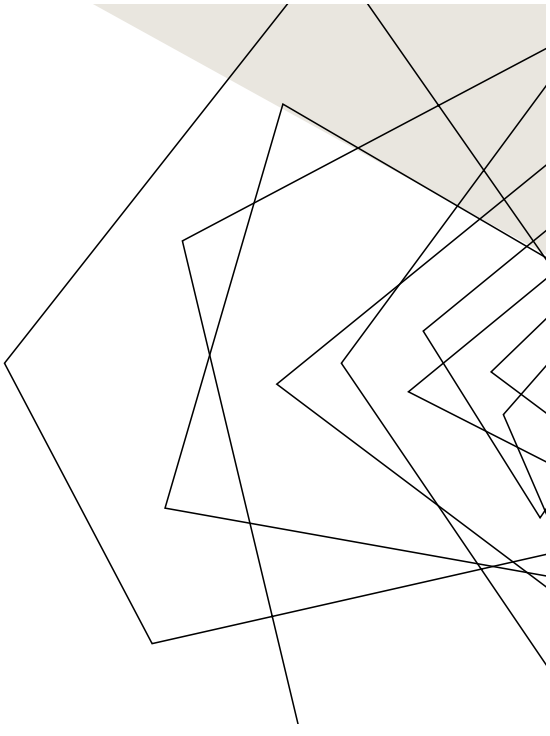
SEVERITY:

Mild: Few, if any, symptoms in excess of those required to make a diagnosis are present, and symptoms result in no more than minor impairments in social or occupational functioning.

Moderate: Symptoms or functional impairment between “mild” and “severe” are present.

Severe: Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairments in social or occupational functioning.



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ASSOCIATED FEATURES OF ADHD:

- Emotional dysregulation or emotional impulsivity commonly occurs in children and adults with ADHD.
- Academic or work performance is often impaired.
- Individuals with ADHD may exhibit neurocognitive deficits in a variety of areas, including working memory, set shifting, reaction time variability, response inhibition, vigilance, and planning/organization.
- The heritability of ADHD is approximately 74%.
- Children and adults with ADHD are at a higher risk for suffering trauma and developing subsequent posttraumatic stress syndrome.

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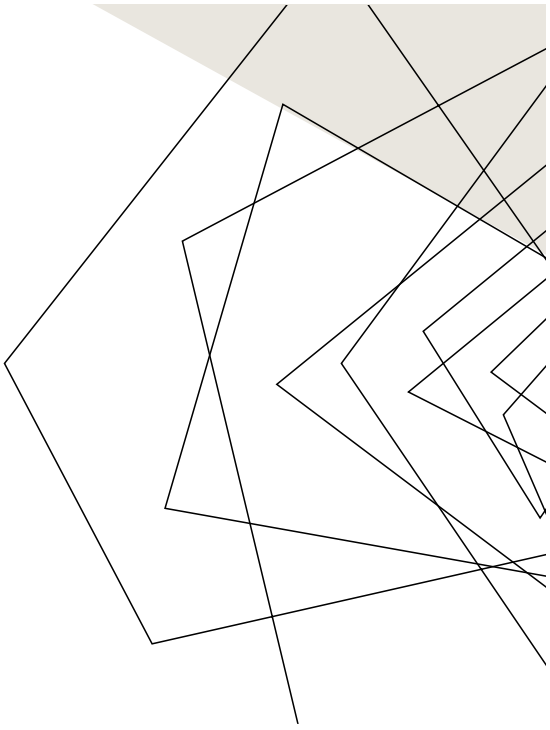

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ASSOCIATED FEATURES OF ADHD:

- Very low birth and degree of prematurity convey a greater risk for ADHD; the more extreme the low weight, the greater the risk.
- Prenatal Exposure to smoking is associated with ADHD even after controlling for parental psychiatric history and socioeconomic status.
- A minority of cases may be related to reactions to aspects of diet. (This does not mean that sugar and red dye cause ADHD).
- Neurotoxin exposure (e.g., lead), infections (e.g., encephalitis), and alcohol exposure in utero have been correlated with subsequent ADHD, but it is not known if these correlations are causal.

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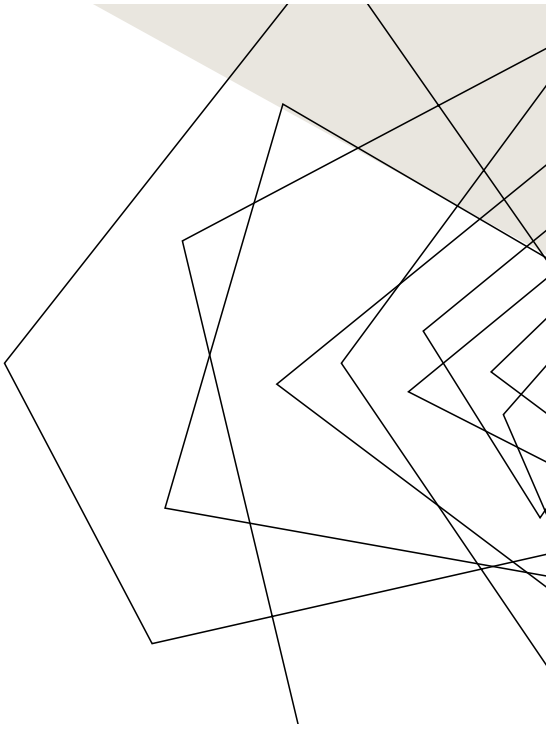

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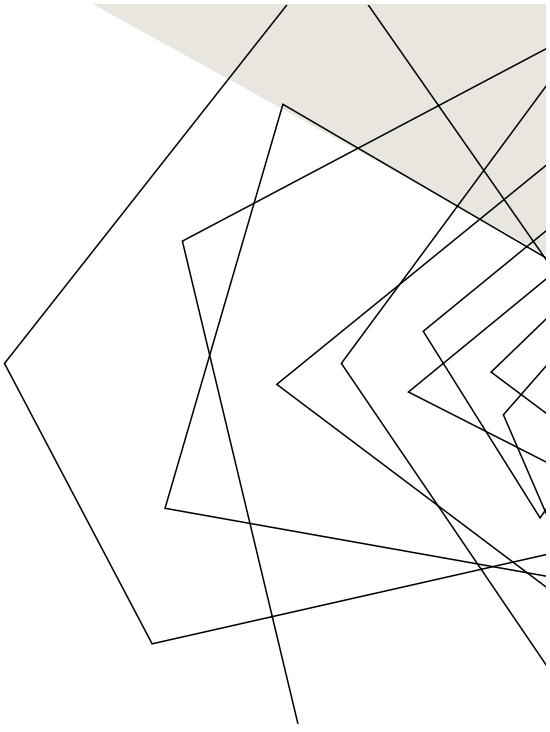
ASSOCIATED FEATURES OF ADHD:

- There is not a single gene for ADHD which means that there isn't one gene responsible for the development of ADHD.
- Visual issues, hearing impairments, metabolic abnormalities, and nutritional deficiencies should be considered as possible influences on ADHD individuals.
- ADHD is elevated in individuals with idiopathic epilepsy.
- ADHD is not caused by "bad" parenting.
- ADHD is currently still more diagnosed in males than females, with the current ration of 2:1 in children and 1.6: 1 in adults. Females are more likely to present primarily with inattentive features. Females' hyperactivity may be more internal and may look like "anxiety" to others.



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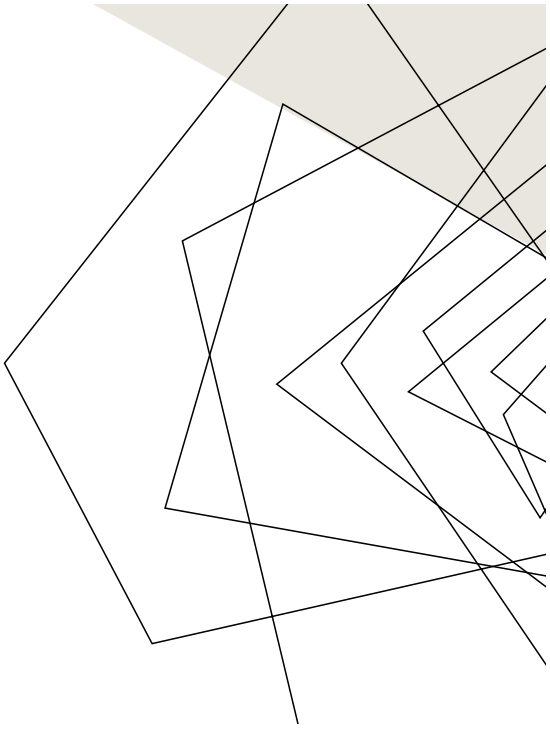
ASSOCIATED FEATURES OF ADHD:

- Although ADHD has been associated with elevated power of slow waves (4-7 Hz "theta") as well as decreased power of fast waves (14-30 Hz "beta"), a later review found no differences in theta or beta power in either children or adults with ADHD relative to control subjects.
- Although some neuroimaging studies have show differences in children with ADHD compared with control subjects, meta-analysis of all neuroimaging studies do not show a difference between individuals with ADHD and control subjects. This is likely due to difference in diagnostic criteria, sample size, tasks used, and technical aspects of the neuroimaging technique. Until these issues are resolved, no form of neuroimaging can be used for diagnosis of ADHD.



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ASSOCIATED FEATURES OF ADHD:

- ADHD is a risk factor for suicidal ideation and behavior in children.
- Likewise, in adulthood, ADHD is associated with an increased risk of suicide attempt, when comorbid with mood, conduct, or substance use disorders, even after controlling for comorbidity.
- Suicidal thoughts are also more common in ADHD populations than in non-ADHD control subjects.

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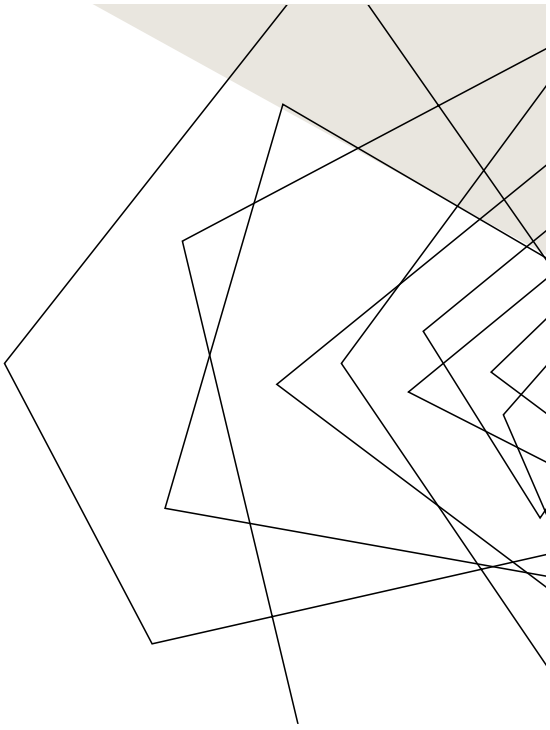

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ASSOCIATED FEATURES OF ADHD:

- Academic deficits, school-related problems, and peer neglect tend to be most associated with elevated symptoms of inattention, where as peer rejection and, to a lesser extent, accidental injury are more salient with marked symptoms of hyperactivity or impulsivity.
- Inadequate or variable self-application to tasks that require sustained effort (or attention) is often interpreted by others as laziness, irresponsibility, and failure to cooperate.

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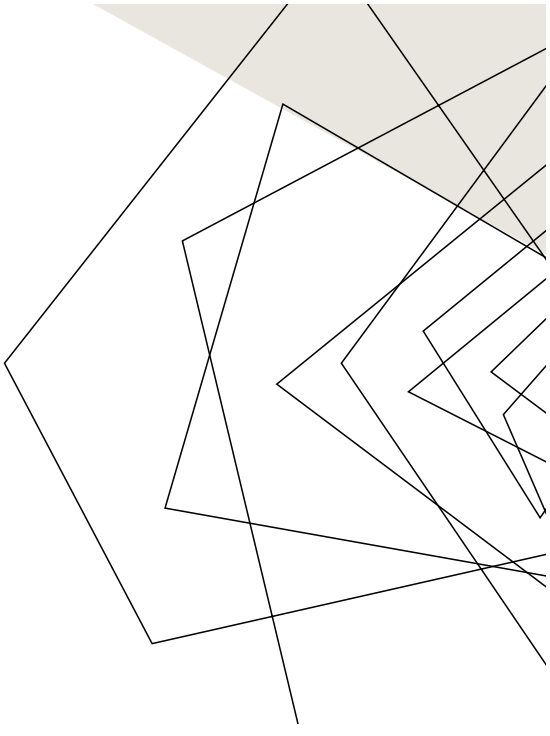

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ASSOCIATED FEATURES OF ADHD:

- Young adults with ADHD have poor stability.
- Adults with ADHD show poorer occupational performance, attainment, attendance, and higher probability of unemployment, as well as elevated interpersonal conflict.
- On average, individuals with ADHD tend to obtain less schooling, have poorer vocational achievement, and have reduced intellectual scores than their peers, although there is greater variability.
- In its severe form, the disorder is markedly impairing, affecting social, familial, and scholastic/occupational adjustment.

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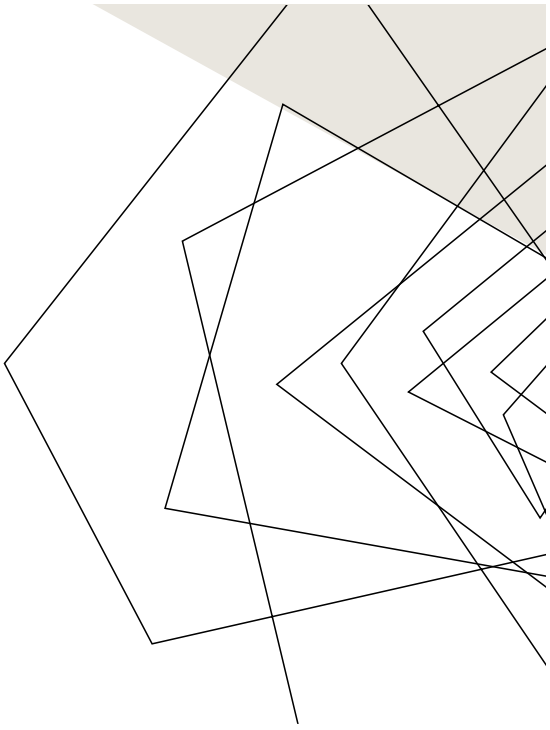

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ASSOCIATED FEATURES OF ADHD:

- Family relationships may be characterized by discord and negative interactions.
- Individuals with ADHD tend to have lower self-esteem relative to peers without ADHD.
- Peer relationships are often disrupted by peer rejection, neglect, or teasing of the individual with ADHD.

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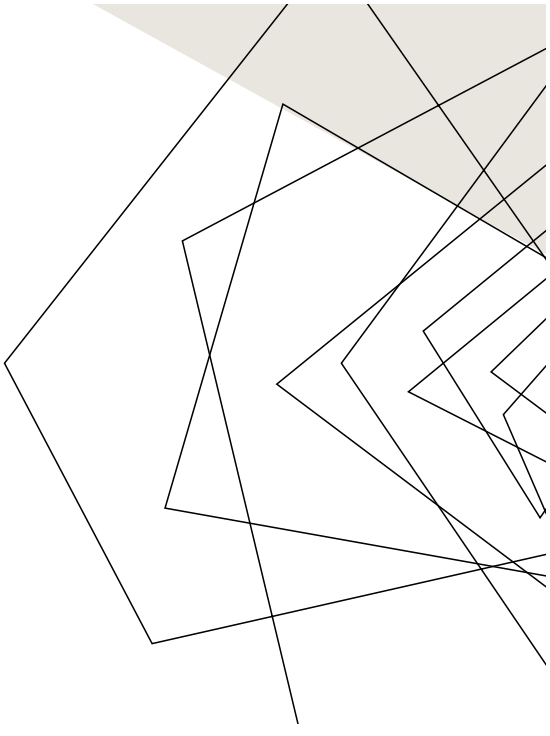

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ASSOCIATED FEATURES OF ADHD:

- Children with ADHD are significantly more likely than their peers without ADHD to develop conduct disorders in adolescence and antisocial personality disorder in adulthood, consequently increasing the likelihood for substance use disorders and incarceration.
- The risk of subsequent substance use disorders is elevated, especially when conduct disorder or antisocial personality disorder develops.
- Individuals with ADHD are more likely than peers to be injured.
- Traffic accidents and violation are more frequent in drivers with ADHD.
- Individuals with ADHD have a higher mortality rate, largely because of accidents and injuries. There may also be an elevated likelihood of obesity and hypertension among individuals with ADHD.

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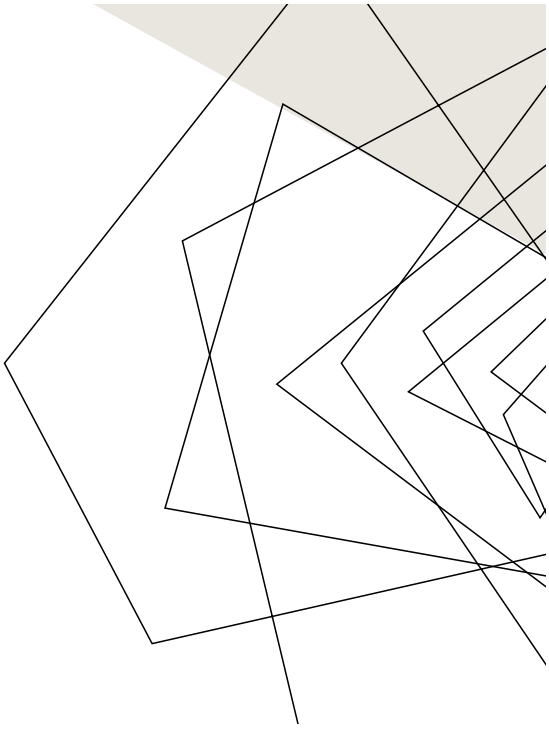
COMORBIDITY

- Females with ADHD have a higher rate of comorbid disorders, predominantly oppositional defiant disorder, autism spectrum disorder, personality disorders, and substance use disorders.
- ODD co-occurs with ADHD in approximately half of children with combined presentation and about a quarter with the predominantly inattentive presentation
- Conduct disorder co-occurs in about a quarter of children or adolescents with combined presentation, depending on age and setting.
- Most children and adolescents with disruptive mood dysregulation disorder have symptoms that also meet the criteria for ADHD; a lesser percentage of children with ADHD have symptoms that meet the criteria for disruptive mood disorder.
- Anxiety disorder, Major depressive disorder, obsessive-compulsive disorder, and intermittent explosive disorder occur in a minority of individuals with ADHD but more often than in the general population.
- Although substance use disorder are relatively more frequent among adults with ADHD in the general population, the disorders are present in only a minority of adults with ADHD.
- In adults, antisocial personality disorders may co-occur with ADHD.



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COMORBIDITY

- ADHD may co-occur in variable symptom profiles with other neurodevelopmental disorder, including specific learning disorder, autism spectrum disorder, intellectual development disorder, language disorders, developmental coordination disorder, and tic disorders.
- Comorbid sleep disorders in ADHD are associated with daytime impairments in cognition (e.g., inattention). Many individuals with ADHD report daytime sleepiness that may meet criteria for hypersomnolence disorder.
- One quarter to one-half of individuals with ADHD report sleep difficulties; studies have shown an association of ADHD with insomnia, circadian rhythm sleep-wake disorder, sleep-disordered breathing, and restless legs syndrome.
- Individuals with ADHD have been found to have elevated rates of a number of medical conditions, particularly allergy and autoimmune disorders, as well as epilepsy.

DSM-5-TR Handbook of Differential Diagnosis. (2024). American Psychiatric Association Publishing.

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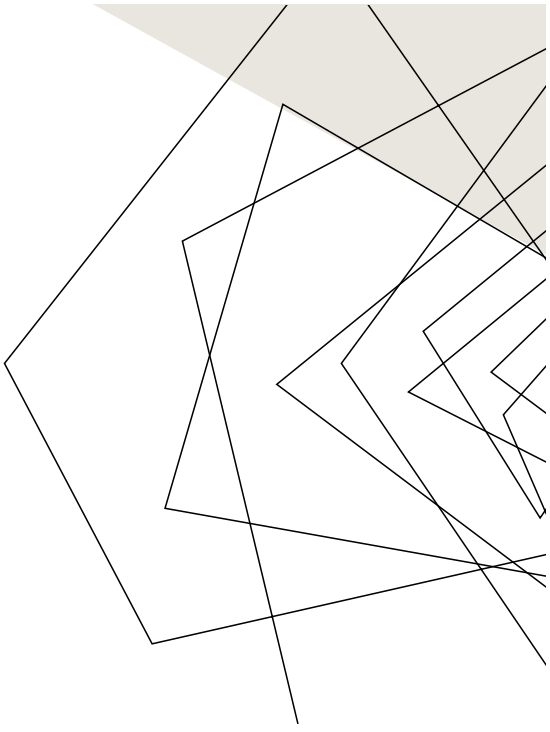

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GENETICS

- ADHD is an extremely inherited disorder.
- Having a parent with ADHD makes a child 6-8 times more likely to have the disorder (35-54%) than other children.
- Biological siblings of a child with ADHD are 3-5 times more likely to have the condition (25-35%).
- The biological mother of a child with ADHD is 3-4 times more likely to have ADHD.
- The biological father is 5-6 times more likely to have it.
- An identical twin of a child with ADHD is 75-90% more likely to have it as well.
- Parents and siblings of a child with ADHD may be more likely to have milder forms of the symptoms or traits of the disorder, even if they don't meet all of the requirements for receiving a diagnosis of it.

(Barkley, 2022)

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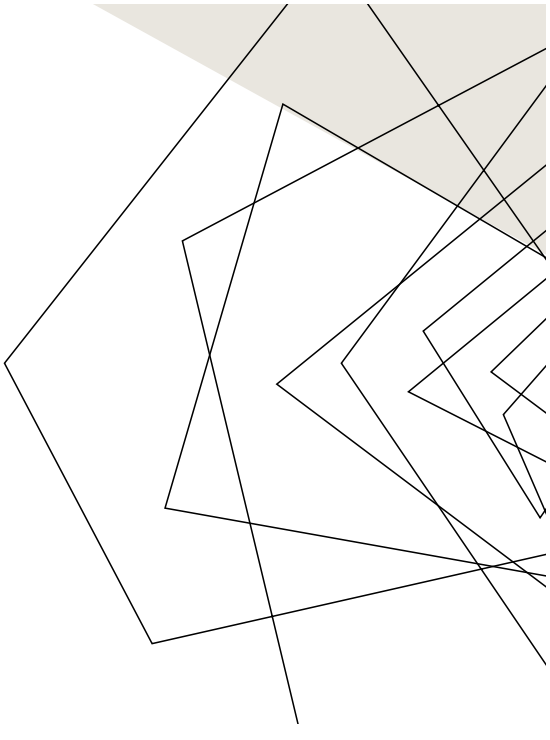

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NEUROLOGY OF THE ADHD BRAIN

- Hundreds of research studies show that ADHD is largely a neurologically caused disorder.
- At least five or six brain regions are reliably linked to the disorder, including the regions in which the executive functions develop and reside.
- In general, the brains of children and adolescents with ADHD are about 3–10% smaller globally in surface gray matter (the material on the outside layer of the brain). But the five specific brain regions involved in ADHD appear to be even smaller—about 15–30% smaller than normal for age.
- Developmental research finds the brain to be 2–3 years delayed in its development in these regions, especially the prefrontal lobes, and to be 10–30% less active than in typical comparison cases.
- Other factors, such as smoking and consumption of alcohol by the mother during pregnancy, exposure to lead and other toxins, and prematurity/low birth weight, can also be involved in causing ADHD by interfering with brain growth and functioning, especially in the ADHD-related brain regions.
- (Barkley, 2022)

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HOW DOES ADHD WORK IN THE BRAIN?

- Attention Deficit-Hyperactivity Disorder is a neurodevelopmental disorder. There is some parts of the brain that are over and underdeveloped due to dopamine & norepinephrine (happy chemicals).
- The prefrontal cortex is affected by ADHD. The prefrontal cortex is responsible for cognitive functioning, decision making, processing information, etc.
- The four chemical and neurotransmitters that affect ADHD are dopamine, serotonin, norepinephrine, and gamma-aminobutryic acid (GABA).
- These neurotransmitters send signals from one neuron to another.
- When a person has EF difficulties, it may be due to the fact that neurotransmitter activity is low, particularly regarding low activation of dopamine receptors in the prefrontal cortex.
- (Sarkis, 2018)

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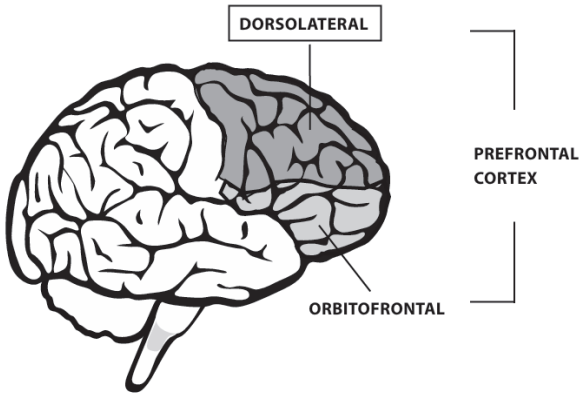
THE RELATIONSHIP BETWEEN ADHD & PFC/DLPFC

IMAGE BY (SARKIS, 2018)



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SLUGGISH COGNITIVE TEMPO:

- Evidence exist that a second attention deficit disorder exists.
- Not enough research has been done on this disorder.
- Very stigmatized name
- Overlap in symptoms with ADHD but different. Can also co-occur with ADHD.
- The condition of SCT remains highly understudied.
- There is no DSM-5 TR or "diagnostic label" per say.
- Dr. Russell Barkley's research reports that symptoms of SCT include:
- (1) daydreaming (2) trouble staying awake/alert
- (3) feeling mentally foggy/easily confused (4) staring a lot
- (5) looks/feel spacey, mind is elsewhere (6) is lethargic
- (7) is underactive (8) is slow- moving/sluggish
- (9) doesn't process questions or explanations accurately (10) appears drowsy/sleepy;
- (11) appears apathetic/withdrawn (12) is lost in thoughts
- (13) slow to complete tasks (14) lacks initiative/effort fades.

(Barkley, 2018)

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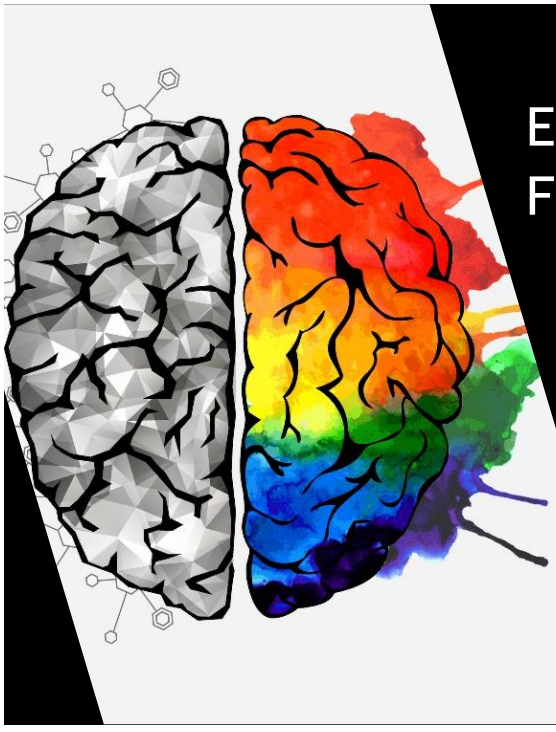

EXECUTIVE FUNCTIONING

- Executive Functions are those capacities of the brain that allow a person to recognize the tasks that the person needs to do, be motivated adequately to begin those tasks, plan for and organize how to accomplish the task, initiate the various components of the tasks without excessive delay, and sustain effort and actions needed to complete the tasks (Brown, 2019).

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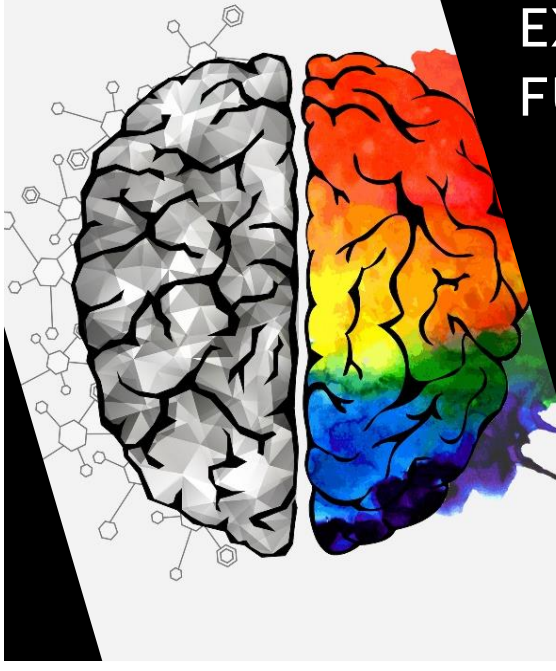

EXECUTIVE FUNCTIONING

- Executive functions mature slowly during childhood, becoming more complex and adaptive throughout adolescence and into adulthood. Because their development is dependent upon the slowest developing structures of the brain, executive functions do not fully mature well into an individual's mid to late 20's (p. 1).
- Many tasks of daily life require the synchronized deployment of multiple executive functions. Driving a car, getting ready to go to school or work, crossing a street, reading and recalling information, solving a math problem, writing an essay, shopping for groceries, participating in a conversation, and preparing a meal are just a few examples (p. 1).
- (Brown, 2019)

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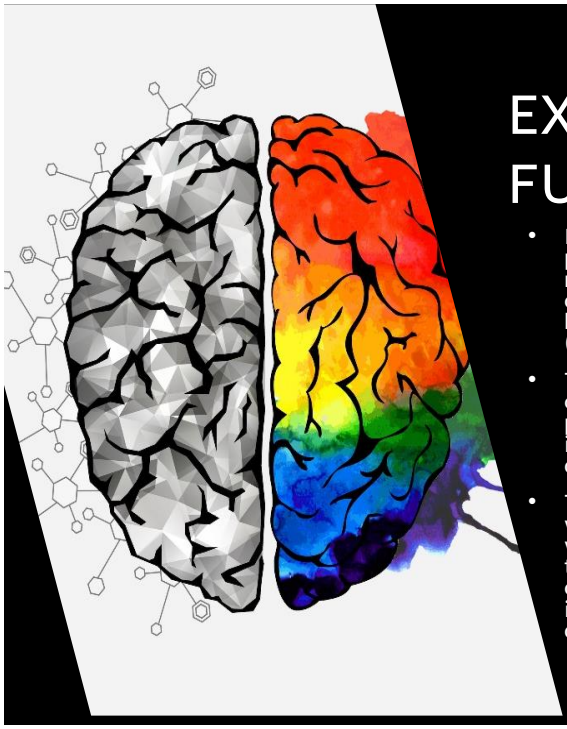

EXECUTIVE FUNCTIONING

- Executive functions (EF) refer to a set of cognitive processes such as selective attention, working memory, set-shifting, planning, and inhibitory control, which are governed by the frontal lobe of the brain, particularly the dorsolateral prefrontal cortex (DLPFC).
- The DLPFC plays an important role in our ability to organize and process information, make decisions, plan ahead, manage time, regulate moods, store information, learn from mistakes and consequences, and get motivated to start and complete tasks
- Together, these metacognitive processes make up what are known as the executive functions. In other words, think of the executive functions as doing things similar to what an executive does at a company: they take in, process, and distribute information. Their primary functions are to inhibit and self-regulate behavior.

(Sarkis, 2018)

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EXECUTIVE FUNCTIONING

- When you have disorders like ADHD, PTSD, anxiety, or a traumatic brain injury (TBI), the executive functions can become impaired. Impairment in executive functions (or executive dysfunction) can cause forgetfulness, difficulty getting motivated, an inclination to lose items, a tendency to interrupt others, hyperfocusing (which causes difficulty switching tasks), and can even cause mood swings. Executive Functioning affects the ability to self-regulate.
- Self-regulation is the ability to get back on task, without needing any external redirection or reminders. Behavioral inhibition is the ability to stop and think about how one is going to respond to a particular stimulus. It allows a person to think through something without becoming distracted – it controls for "interference" in the environment. It's like a stop sign pops up reminding a person to hold a thought instead of interrupting, or to think about whether a choice is in a person's best interest. With executive dysfunction, that stop sign tends to pop up a little late or not at all. In this chapter you will learn about the specific executive functions and what happens when they are not working properly.

(Sarkis, 2018)

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EXECUTIVE FUNCTIONING

Executive Functioning tasks include:

- working memory
- time management
- emotion regulation
- cognitive flexibility
- forethought
- learning from consequences
- organization
- reconstitution of information
- Planning

(Sarkis, 2018)

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TREATMENT OF ATTENTION DEFICIT/HYPERACTIVITY DISORDER

- Counseling clients and families to create a better understanding of ADHD.
- Acceptance of the disorder, compassion for the person affected, a willing ness to help, and forgiveness of the person affected for the problems the disorder may create for others.
- Efforts to modify the behavior of both the affected person and any caregivers
- Making changes to the environment to reduce impairments (accommodations)
- Using medication(s) for management of ADHD and any comorbid disorders, where needed
- Counseling parents about the nature of their child's disorder and the range of effective treatments for it.
- Training parents in child behavior management methods.
- Helping parents and adolescents with school homework organization and completion.
- FDA-approved ADHD medications: stimulants, nonstimulants, and antihypertensive medicines reformulated for use with ADHD. These come in short-acting (3–5 hours) and long- acting versions (8–12 or more hours).
- Behavior management methods for use in school by teachers.
- Special education services, as needed.
- Routine and frequent physical exercise to help children cope with stress and temporarily reduce symptoms of ADHD.
- mindfulness meditation-based strategies for reducing stress and improving daily functioning.

(Barkley, 2022)

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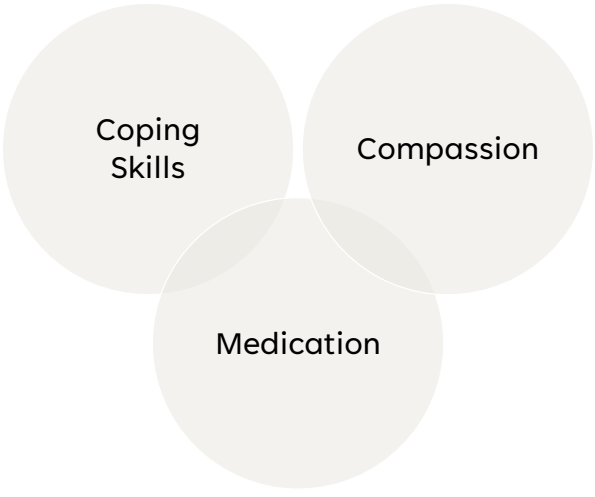
TREATMENT OF ADHD



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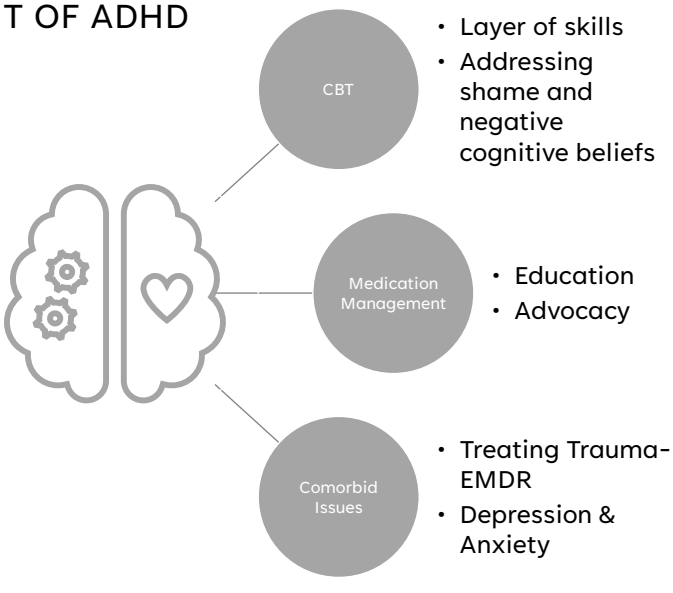
TREATMENT OF ADHD



- Layer of skills
- Addressing shame and negative cognitive beliefs

- Education
- Advocacy

- Treating Trauma- EMDR
- Depression & Anxiety

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SHAME BASED MESSAGES

- An individual with ADHD may feel shame, experiencing judgement from others or the world.
- Shame affects not just what someone thinks but who they believe they are as a whole person.
- Shame may develop from the continual failure to meet expectations from others.
- This includes expectations from friends, parents, teachers, spouses, bosses, and others.
- For people with ADHD, corrective or negative messages are being sent constantly because of their inability to self-regulate.
- ADHD and the Epidemic of Shame reports that "it is estimated that those with ADHD receive 20,000 corrective or negative messages by age 10" (William Dodson, M.D., LF-APA 2022).
- Someone with ADHD might view themselves as different and not good enough.
- Many people with ADHD experience low self-esteem and withdraw from others because of the stigma and shame. This reinforces the "not good enough" message.

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NON RESEARCH BACKED TREATMENT FOR ADHD

- Dietary supplements
- Restrictive elimination diets
- Alternative medicines or health food remedies
- Long-term psychotherapy or psychoanalysis (this doesn't apply to when there is comorbid issues)
- EEG neurofeedback
- Cognitive training games
- Sensory- integration training
- Chiropractic treatments such as scalp massage
- Acupuncture
- Yoga
- Transcranial magnetic stimulation

(Barkley, 2022)

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MEDICATION MANAGEMENT FOR ADHD

- Medications, particularly stimulant medication, may improve executive function performance, particularly when a client has ADHD.
- When a client is taking stimulant medication, there is a biological change in how the brain takes in, processes, and stores information.
- If you have a client off medication one week and on medication the next, you may see quite a difference.
- When stimulant medication is "on board," your client may have better eye contact, may be able to accurately repeat back to you what you have discussed, and may even sit still during the session.
- Off medication, your client may not seem to be not fully connecting with you, and they may ask you to repeat things that you have said. They also may appear to be more restless and may even ask you if the appointment is over yet.
- Studies have found that psychotropic medications and behavioral treatments used in conjunction can enhance the effectiveness of each treatment
- Oftentimes, medication is recommended along with another form of treatment, such as counseling. In essence, "pills" may be needed in order to learn the "skills" taught in counseling sessions.
- Medication has a 75-93% success rate for ADHD
- Studies have not found any evidence of permanent brain "rewiring," stunted height, or malnutrition associated with the use of stimulant medication with the exception of an already existing cardiac issue.

(SARKIS, 2018)

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MEDICATION MANAGEMENT FOR ADHD

- With regard to concerns that clients may become "addicted" to stimulant medications, studies have found stimulant medications have either have no effect, or even reduce an individual's chances of addiction.
- Stimulant medication has also been found to decrease the chances of relapse in recovering addicts.
- Stimulants work by increasing dopamine and norepinephrine activation in the dorsolateral prefrontal cortex (DLPFC). Side effects include dry mouth, difficulty sleeping, and appetite suppression
- Stimulant medications have been found to increase clients' quality of life, particularly among those with ADHD.
- Stimulant medication increases the rate of employment in ADHD adults, and the earlier a client starts on medication, the more of a chance they have of being employed.
- Stimulant medication also decreases impulsive high-risk financial choices.

(SARKIS, 2018)

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LIST OF STIMULANT MEDICATIONS:

Stimulant Medications include:

- Extended-release (half-life or effectiveness is 8 to 12 hours) ones-
- Conncerta (extended-release methylphenidate)
- Vyvanse (lisdexamfetamine)
- Daytrana (methylphenidate transdermal)
- Focalin XR (dexmethylphenidate extended-release)
- Adderall XR (extended-release dextroamphetamine of mixed salts)
- Dexedrine spansule (dextroamphetamine)
- Immediate-release (half-life or effectiveness is 3 to 4 hours)-
- Ritalin (methylphenidate)
- Focalin (dexmethylphenidate)
- Dexedrine (dextroamphetamine) (SARKIS, 2018)

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STIMULANT MEDICATIONS:

- Stimulant medication can significantly improve executive functioning.
- Several studies have been conducted looking at how stimulant medication changes the manner in which neurons in the brain fire.
- When an (ADHD)individual is not taking stimulant medication, there are areas of the brain that fire when they shouldn't, and areas that aren't firing when they should.
- When study subjects are taking stimulant medication, functional magnetic resonance imaging (fMRI) has found more activation in the dorsolateral prefrontal cortex and the parietal cortex during an executive function task than when they were not taking medication and compared to a control group.
- Another study found that stimulant medication, when added to behavioral interventions, helped improve working memory. (SARKIS, 2018)

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NONSTIMULANT MEDICATIONS

- In addition to stimulant medication, antidepressants and other nonstimulant medications can be prescribed for the treatment of ADHD.
- Unlike stimulant medication, non-stimulant medication is not labeled by the FDA as having an addictive potential and therefore can be called into the pharmacy.
- However, studies have found that non-stimulant medications may not be as effective as stimulant medications in treatment of ADHD.
- Although not as effective in treating EF deficits, non-stimulants may be prescribed instead of stimulants for a variety of reasons.

(SARKIS, 2018)

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STRATTERA

- In 2002, Strattera was the first non-stimulant approved by the FDA for the treatment of ADHD.
- It is an antidepressant that is in a class of medications called selective norepinephrine reuptake inhibitors (sNRIs). This means that the medication allows more norepinephrine (a neurotransmitter) to linger in the synapse, which is the space between neurons. Similar to other antidepressants, it may take several weeks for Strattera to become effective.
- Strattera has been found to significantly decrease the severity of hyperactive and inattentive symptoms in adults with ADHD compared to a placebo
- However, one study found that 40% of participants still had significant ADHD symptoms
- In another study, Strattera was found to significantly improve executive function performance in adults with ADHD versus those who took a placebo pill
- Strattera can be helpful for individuals who have not had success with stimulant medication or for those who have depression and anxiety in addition to ADHD
- The most common side effects of Strattera include upset stomach, dry mouth, dizziness, and decreased appetite.
- In ADHD, the neurotransmitters can be reabsorbed too quickly by the sending neuron. Strattera stops the neurotransmitter norepinephrine from being reabsorbed into the sending neuron too quickly.

(SARKIS, 2018)

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INTUNIV (GUANFACINE EXTENDED-RELEASE)

- Intuniv was FDA-approved for the treatment of ADHD.
- Intuniv is a selective α2A receptor agonist, which interacts with receptors in the prefrontal cortex of the brain.
- Intuniv was originally a medication that the FDA approved for the treatment of high blood pressure.
- While the medication's mechanism action of high blood pressure is known, researchers don't know exactly how Intuniv works in the frontal lobe to help decrease impulsivity and improve focus.
- In one study, Intuniv was found to significantly reduce hyperactivity, impulsivity, and inattentiveness compared to a placebo.
- In another study, Intuniv was found to be significantly more effective at reducing ADHD symptoms than Strattera.
- Intuniv side effects include low blood pressure, dry mouth, and drowsiness.
- In addition, you may have to take Intuniv for up to two weeks or more before you see benefits.

(SARKIS, 2018)

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KAPVAY

- In 2010, Kapvay was FDA-approved for the treatment of ADHD.
- Kapvay is known as a centrally-acting α2 adrenergic agonist and works in the prefrontal cortex of the brain.
- Like Intuniv, the FDA initially approved the immediate-release version of Kapvay for the treatment of high blood pressure.
- Like Intuniv, Kapvay's mechanism of action is known for treating high blood pressure, but it is not known exactly how it works in the frontal lobe.
- In some studies, Kapvay has been found to significantly reduce ADHD symptoms versus placebo.
- It has also been found to help significantly reduce ADHD symptoms in subjects who were taking stimulant medication at the same time.
- Side effects of Kapvay include drowsiness, dizziness, fatigue, and low blood pressure.
- As with other non-stimulant medications, have your client speak with the doctor if they want to discontinue the medication.
- Suddenly stopping Kapvay can cause withdrawal symptoms, such as increased blood pressure, headache, and feeling lightheaded.

(SARKIS, 2018)

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VYVANSE IS A CENTRAL NERVOUS SYSTEM STIMULANT. ONLY BECOMES ACTIVE ONLY AFTER IT IS ABSORBED AND THEN METABOLIZED IN THE BODY.

A stimulant that is less likely to be abused because it only works after it is metabolized in the body.

Only release the active drug slowly and steadily, which explains why patients who have taken Adderall and switched to Vyvanse often describe the feeling they get as "smoother."

ADHD sufferers-pay attention: Here's how vyvanse works. American Council on Science and Health. (n.d.). https://www.acsh.org/news/2016/09/23/adhd-sufferers%25E2%2580%2594pay-attention-heres-how-vyvanse-works-10206

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THE IMPORTANCE OF TESTING FOR ADHD

- Testing is essential for ADHD.
- It helps to define what symptoms are prominent.
- What type of ADHD & severity
- Rule/out other diagnosis
- See if there is any comorbid issues
- There is LEVEL A, B, and C for testing.
- Each level is dependent on the amount of education and training that you have.

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Q-GLOBAL

- Q-global is a web-based platform for testing which includes the administration, scoring, and reporting of each test.
- Q-global creates a profile for each person for reasons for testing, past diagnostics, and history.
- Q-global gathers in an in-depth history approach. It includes:
- Marital Status/Children/Living environment
- Language history- Exposure to English, fluency of English, and history.
- Development History and Milestones- such as birth information (NICU, Born premature/past due date, Trouble breathing/required assistance, and low birth weight.
- This also includes-sitting alone, crawling, standing alone, walking alone, babbling, eating/self-eating, and social interactions, etc.

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Q-GLOBAL

- Highest level of education for self, mother, and father.
- School/Class Placement
- Current School- attendance/performance/interpersonal or behavioral difficulties
- Frequency of Changing School, retained grades, pre-kindergarten experience, and full/half-day of kindergarten.
- Past/Current Academic Performance with Strengths & Weakness
- Diagnosed past & current learning disabilities.
- Visual & Hearing Conditions- does the client see & hear okay with corrective. They should be wearing contacts or glasses when testing if they are supposed to.
- Sensory or motor conditions
- Health Conditions
- Current employment/past employment with work performance

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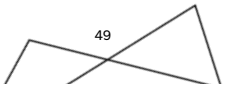
BROWN EXECUTIVE FUNCTION/ATTENTION SCALES

- The Brown Executive Function/Attention Scales (Brown EF/A Scales) are a set of rating scales designed to evaluate executive functions related to attention-deficit/hyperactivity disorder (ADHD) in individuals ages 3 years and older (pg. 1).
- The Brown EF/A scales can be used a preliminary screening tool for ADHD, as a part of a comprehensive ADHD evaluation, and to monitor progress and treatment for effectiveness for those diagnosed with ADHD (pg. 1).
- The Brown EF/A scales consist of parent, teacher, and self-report forms that cover four age levels. Each form comprises between 56 and 58 items.
- The Brown EF/A scale can be administered via Q-Global using a computer or tablet or in a traditional paper-pencil format.
- The Brown EF/A are designed to measure this broader notion of attention as a dynamic group of interacting executive functions and potential impairments. Items on the Brown EF/A Scales are grouped into six clusters, each representing an underlying aspect of the author's model of executive function impairment as it relates to ADHD (pg. 1). (Brown, 2019)

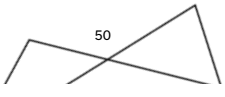


BROWN EXECUTIVE FUNCTION/ATTENTION SCALES

- **There are six clusters of the Brown EF/A Scales. They include:**

1. **Cluster 1. Activation: Organizing, Prioritizing, and Activating to Work**
2. **Cluster 2. Focus: Focusing, Sustaining, and Shifting Attention to Tasks**
3. **Cluster 3. Effort: Regulating Alertness, Sustaining Effort, and Adjusting Processing Speed**
4. **Cluster 4. Emotion: Managing Frustration and Modulating Emotions**
5. **Cluster 5. Memory: Utilizing Working Memory and Accessing Recall**
6. **Cluster 6. Action: Monitoring and Self-Regulating Action**

(Brown, 2019)



CLUSTER 1. ACTIVATION: ORGANIZING, PRIORITIZING, AND ACTIVATING TO WORK

- The Activation cluster addresses difficulties individuals may have organizing tasks and materials, estimating time, prioritizing tasks, and getting started on work-like tasks (i.e., activities they have not usually chosen for pleasure). People with ADHD often have chronic difficulty with excessive procrastination. Often, they will put off getting started on a task--even a task they recognize as important to them--until the very last minute. It is as though they cannot get themselves started until they perceive the task as an acute emergency or as something where delay will result in punishment. Items in this cluster involve queries about following instructions, keeping track of assigned tasks, getting motivated in the morning, daydreaming, and rushing through assigned work.

(Brown, 2019)

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CLUSTER 2. FOCUS: FOCUSING, SUSTAINING, AND SHIFTING ATTENTION TO TASKS

- The Focus cluster addresses problems individuals may have in sustaining attention and focus for work-like tasks or in shifting attention when needed from one activity to another. For people with ADHD, it is often difficult to focus on a specific task and sustain their attention on that task. At times, they may be easily distracted by things going on around them or by thoughts in their own minds. At other times, they may find themselves stuck on one thing, unable to shift to another task even when directed to do so. In addition, focus on reading poses difficulties for many with ADHD, especially when what they are reading is not particularly interesting to them. They generally understand the words they are reading but have to read them over and over again in order to fully grasp and remember the meaning. Items in this cluster involve queries about losing focus, paying attention, becoming easily distracted, and getting stuck doing one thing and having a hard time transitioning to another activity. (Brown, 2019)

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CLUSTER 3. EFFORT: REGULATING ALERTNESS, SUSTAINING EFFORT, AND ADJUSTING PROCESSING SPEED

- The Effort cluster addresses problems individuals may have in staying alert and sustaining sufficient effort for work-related tasks. It also addresses difficulties with processing information, completing tasks, and maintaining performance consistency. Many with ADHD can perform short-term projects well but have much more difficulty with sustained effort over longer periods of time. It may take them longer than others to process and react to what they see or hear, and they may find it difficult to complete tasks on time, especially when they need to explain themselves in writing. Many also experience chronic difficulty regulating their sleep and alertness. They often stay up too late simply because they can't stop themselves from thinking about things. Once asleep, however, they often sleep very soundly and have trouble getting up in the morning. At other times, they may become drowsy when not physically active or cognitively engaged even when they've had sufficient rest. Items in this cluster involve queries about staying interested in routine tasks long enough to finish them, giving up when things get difficult, requiring extra time to complete routine tasks, and having trouble sleeping at night or staying alert during the day. (Brown, 2019).

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CLUSTER 4. EMOTION: MANAGING FRUSTRATION AND MODULATING EMOTIONS

- The Emotion cluster addresses difficulties individuals may have with regulating emotional reactions to the extent that they take over much of what the individuals are thinking or doing. Although the DSM-5 does not recognize any symptoms related to emotion management as an aspect of ADHD, many with the disorder describe chronic difficulties managing frustration, anger, worry, disappointment, desire, and other emotions. They find it very difficult to put their emotions into perspective and get on with what they need to do. Many speak as though these emotions, when experienced, take over their thinking the way a computer virus might infect a computer and make it impossible for them to attend to anything else. Items in this cluster involve queries about excessive irritability, sensitivity to criticism, overwhelming nervousness and worry, and unhappiness. (Brown, 2019)
- PLEASE NOTE THAT OUR DSM-5 TR STATES “Emotional dysregulation or emotional impulsivity commonly occurs in children and adults with ADHD.”

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CLUSTER 5. MEMORY: UTILIZING WORKING MEMORY AND ACCESSING RECALL

- The Memory cluster addresses problems individuals may have with forgetfulness in daily routines and recall of learned material. Very often, people with ADHD will report that they have adequate or exceptional memory for things that happened long ago but great difficulty remembering where they just put something, what someone has just said to them, or what they were about to say. They may describe having difficulty holding one or several things in mind while also attending to other tasks. In addition, many often complain that they cannot readily retrieve information they have learned from their memory when they need it. Items in this cluster involve queries about remembering instructions, following through with planned activities, keeping track of belongings, and recalling previously known information. (Brown, 2019)

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CLUSTER 6. ACTION: MONITORING AND SELF-REGULATING ACTION

- The Action cluster addresses problems individuals may have in recognizing appropriate behavior and self-regulating their actions. Many people with ADHD, even those without problems of hyperactive behavior, report chronic problems with inhibiting their actions. They often are impulsive in what they say or do and in the way they think, at times jumping too quickly to inaccurate conclusions. Many also report problems in monitoring the context in which they are interacting. They fail to notice when other people are puzzled, hurt, or annoyed by what they have just said or done and thus fail to modify their behavior in response to specific circumstances. They also report chronic difficulty in regulating the pace of their actions to slow themselves down or speed up as needed for specific tasks. Items in this cluster involve queries about interrupting others, being excessively restless, making careless mistakes, and being disruptive to others. (Brown, 2019)

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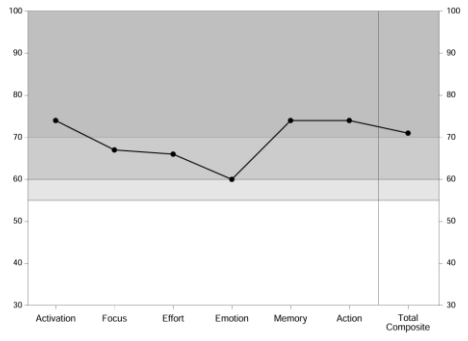
BROWN EXECUTIVE FUNCTION/ATTENTION SCALES

BROWN EF/A SCALES *T*-SCORE PROFILE



Score Summary Table

Score	Score Description	Raw Score	*T* Score (Plotted)	Percentile Rank	90% Conf. Interval
Activation	Organizing, prioritizing, and activating to work	17	74	97	68-80
Focus	Focusing, sustaining, and shifting attention to tasks	16	67	93	62-72
Effort	Regulating alertness, sustaining effort, and adjusting processing speed	15	66	91	60-72
Emotion	Managing frustration and modulating emotions	14	60	82	55-65
Memory	Utilizing working memory and accessing recall	18	74	97	68-80
Action	Monitoring and self-regulating action	19	74	96	68-80
Total Composite	Overall indication of executive functioning	99	71	95	68-74

***T*-Score Interpretation**

Suggested ranges for the interpretation of the cluster and Total Composite *T* scores are as follows:	*T*-Score Range	Classification
	70 and above	Markedly atypical (very significant problem)
	60-69	Moderately atypical (significant problem)
	55-59	Somewhat atypical (possibly significant problem)
	54 and below	Typical (unlikely significant problem)

(Brown, 2019)

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ITEM RESPONSES BY CLUSTER

Cluster 1. Activation	No Problem	Little Problem	Medium Problem	Big Problem
1. I have trouble getting started on projects, assignments, or other tasks.			•	
7. I have trouble switching from one activity to another.			•	
18. It's difficult for me to wake up, get myself out of bed, and get started in the morning.			•	
25. I have trouble organizing my work and doing the most important things first without wasting time.		•		
28. I tend to be disorganized and forget due dates for projects, assignments, or bills.				•
34. It takes me a long time to answer questions.	•			
40. My work is rushed, incomplete, or late because I don't plan enough time to do things well.			•	
44. I wait until the last minute to do things.				•
53. I have excessive difficulty starting tasks I should do, like running errands and paying bills, unless the task is interesting.			•	

58

(Brown, 2019)

58

Cluster 2. Focus	No Problem	Little Problem	Medium Problem	Big Problem
3. I need to be reminded to keep working or to pay attention.		•		
8. I am easily distracted by background noises or other things going on around me.				•
17. I find it hard to focus on one thing for a long time unless it's something I'm really interested in.			•	
32. I need to hear or read instructions several times before I understand them.			•	
42. I lose focus easily when I have to listen to or read something that isn't very interesting.			•	
45. I get stuck doing one thing and have a hard time switching to something else that is more important.		•		
47. Because I speak too quickly or keep changing topics while talking, others have trouble understanding me.		•		
50. I try to pay attention in conversations, but my mind wanders and I miss out on important information.			•	
56. When I'm reading something that isn't very interesting, I have to read it more than once to remember it.			•	

(Brown, 2019)

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Cluster 3. Effort	No Problem	Little Problem	Medium Problem	Big Problem
4. Unless I'm doing something I enjoy, I feel sleepy or tired during the day, even after a full night of sleep.			•	
10. I need extra time to finish my assignments or projects.		•		
16. If I can't understand something right away, I stop trying.		•		
21. My work is inconsistent; sometimes it's good, sometimes it's not.		•		
29. I have trouble getting to sleep at night because I can't stop thinking about different things.				•
35. I need to be reminded to get started or to keep working on tasks that need to be done.		•		
39. It's hard for me to focus on a task unless it's interesting or I'm working with someone else.			•	
46. I have trouble finishing routine tasks that don't interest me.			•	
52. When I'm writing, I may have good ideas, but it takes me a very long time to put them into sentences and paragraphs.		•		
55. Soon after starting a project or assignment, I get bored and don't want to finish it.		•		

(Brown, 2019)

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Cluster 4. Emotion	No Problem	Little Problem	Medium Problem	Big Problem
6. I feel excessively stressed or anxious in situations that should be manageable for me.		•		
12. I worry too much about things that could go wrong and what others might be thinking about me.		•		
19. I get frustrated and irritable over little things.			•	
23. I get overly sensitive or defensive when someone teases or criticizes me.			•	
27. I spend too much time on little details trying to make my work perfect.		•		
37. I overreact when I'm angry, even to small things.			•	
43. I get so nervous in school or at work that I have trouble remembering things I thought I knew.			•	
48. I feel sad or depressed and think that things may never get better.		•		
51. I have a hard time controlling my temper.			•	

(Brown, 2019)

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Cluster 5. Memory	No Problem	Little Problem	Medium Problem	Big Problem
5. I have a hard time following instructions, especially when I have more than one thing to do at the same time.			•	
9. It's difficult for me to take notes and keep listening to what else is being said.		•		
13. I remember some of the details in assigned reading but have trouble understanding the main points.		•		
15. I tend to forget to bring--or often misplace--things I need, such as phone, keys, wallet, or purse.			•	
22. When writing or talking, it's easy for me to wander off on some detail and forget the main thing I am trying to say.			•	
26. I tend to forget a lot of what I have just heard in conversations.		•		
30. When writing, I put in--or leave out--letters or words without meaning to.				•
38. I have trouble memorizing things like names and dates.		•		
41. I have a hard time understanding and remembering directions or instructions.			•	
57. I plan to do things but forget about them (like running errands or paying bills).				•

(Brown, 2019)

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Cluster 6. Action	No Problem	Little Problem	Medium Problem	Big Problem
2. I get restless and fidgety when I have to sit still or wait in line.				•
11. If I think of something to say during a conversation, I interrupt others to say it before I forget it.			•	
14. I don't notice when I may be boring, confusing, or irritating others.		•		
20. I get restless and fidget with my fingers, hair, clothing, or jewelry too much.				•
24. When working on projects or doing assignments, I tend to do them too quickly and make careless mistakes.			•	
31. I do or say things without thinking and often regret my actions later.		•		
33. It's hard for me to wait to say, get, or do something.			•	
36. I talk a lot and do not seem to know when to stop.			•	
49. It is hard for me to stop doing things I like to do, like watching TV or playing games, even when I know I should.		•		
54. I am quick to jump to conclusions and interrupt others when they are in the middle of doing or saying something.			•	

(Brown, 2019)

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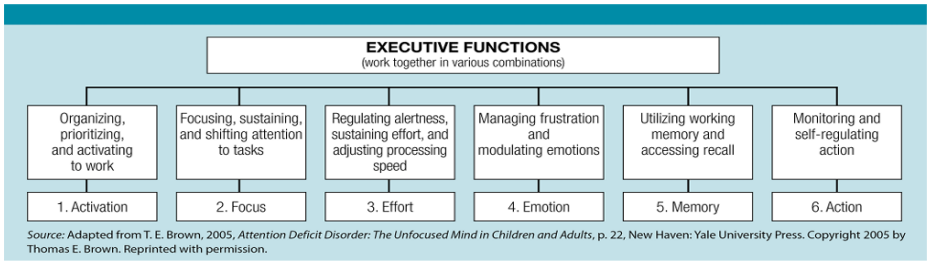
ABOUT THE BROWN EF/A SCALES

The Brown Executive Function/Attention Scales (Brown EF/A Scales) provide an easily understandable, standardized tool to collect information about the problems an individual demonstrates or reports with executive functions, the self-management functions that support attention in multiple tasks of daily life. Results are compared with norms to indicate how any reported problems over the past 6 months (or since the assessment was last administered) compare to other people of similar age. The diagram below shows the six clusters of executive function assessed by the Brown EF/A Scales that are often impaired in ADHD.



Source: Adapted from T. E. Brown, 2005, *Attention Deficit Disorder: The Unfocused Mind in Children and Adults*, p. 22, New Haven: Yale University Press. Copyright 2005 by Thomas E. Brown. Reprinted with permission.

This report for Chellsea Sparks presents *T* scores derived from a self-report rating using the Brown EF/A Scales Adult Self-Report Form. (Ratings from friends or partners can also be collected but normative comparisons are not available.) Individual scores indicate how much of a problem the adult appears to have with each of the clusters; the Total Composite score is a composite of the six cluster scores. If scores indicate significant problems, a comprehensive clinical evaluation for ADHD and other possible learning, emotional, or behavioral problems should be done by a qualified clinician. These scales can also be used to monitor progress in treatment.

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(Brown, 2019)

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DELIS RATING OF EXECUTIVE FUNCTIONS (D-REF)

- Can be administered for both children and adults
- Assessments can include teacher, parent, and self forms.
- Reading level is a 4th grade level
- Scores & Interpretation is a T-score/Composite Level
- Can be administered through Q-Global
- Asses the frequency of behavioral, emotional, and cognitive symptoms of executive function problems.
- The test provides information on the frequency of executive function deficits and identifies the most distressing symptoms for the client and others.

(*Pearsonassessments,* 2021)

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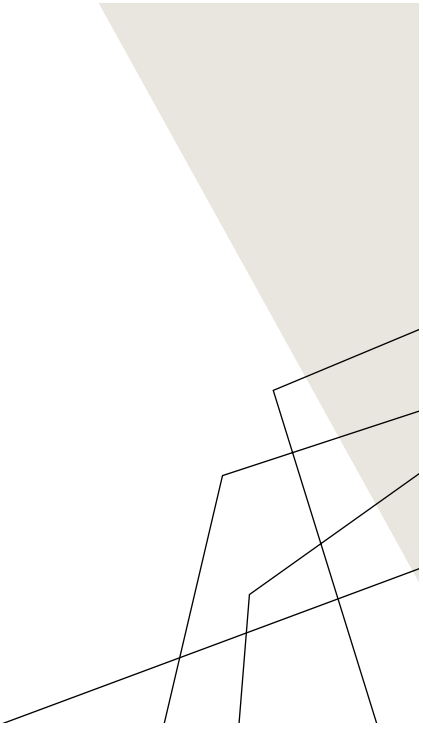

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DELIS RATING OF EXECUTIVE FUNCTIONS (D-REF)

The D–REF Adult is designed to assist in the assessment of individuals suspected of having executive dysfunction due to conditions such as:

- Traumatic brain injury
- Attention-deficit/hyperactivity disorder
- Cerebral vascular disease
- Neurodegenerative disorders
- Neuropsychiatric conditions

(*Pearsonassessments,* 2021)

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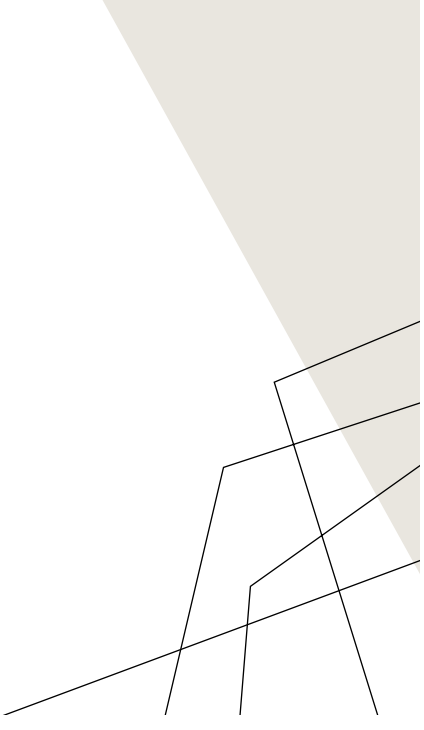

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DELIS RATING OF EXECUTIVE FUNCTIONS (D-REF)

- Each form has 58 items
- The responses to each of those items include:
- Seldom/Never, Monthly, Weekly, or Daily.
- In addition, the D–REF Adult captures the 5 most distressing symptoms to the client or the person completing the Collateral Rating Form.
- The 58 items that comprise the forms quantify symptoms in terms of the frequency in which they occur, but the 5 most distressing symptoms help identify the symptoms that present the most significant problems for the individual, apart from how often they occur.

(*Pearsonassessments,* 2021)

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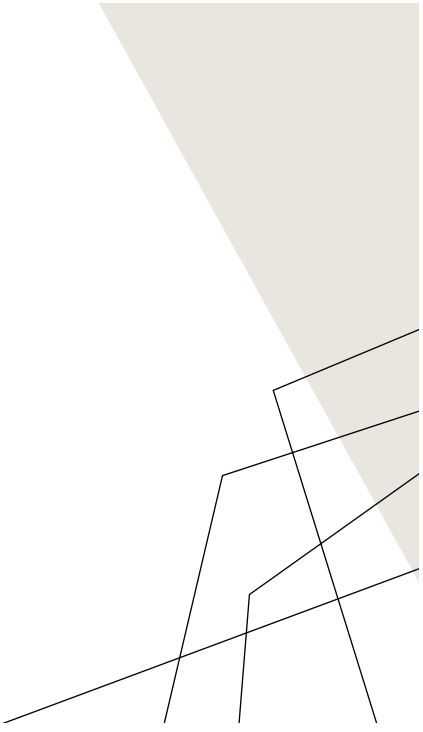

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DELIS RATING OF EXECUTIVE FUNCTIONS (D-REF)

Benefits of the D-REFT include:

- Normative data to help identify symptoms and potential areas of intervention
- Identification of symptoms that create the most distress for the client and others
- Access to raw scores, standard scores, and index comparisons data using Q-global®
- Recommended intervention strategies based on both the Self and Collateral Rating Form clinical index T scores
- Progress monitoring by evaluating changes in symptoms between two administrations

(*Pearsonassessments,* 2021)

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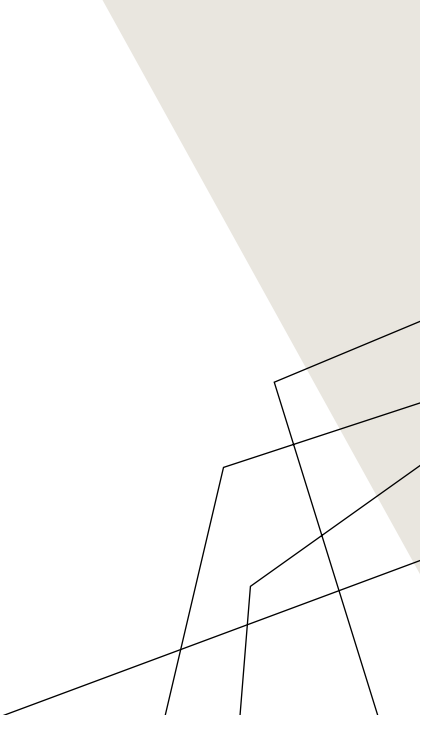

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DELIS RATING OF EXECUTIVE FUNCTIONS (D-REF)

The D–REF Adult provides users with the following indexes:

- An overall score for executive functioning
- **Three core indexes-**
- Behavioral Executive Functioning
- Emotional Executive Functioning
- Cognitive Executive Functioning
- **Five clinical indexes-**
- Attention/Working Memory
- Activity Level/Impulse Control
- Emotional Control/Anger Management
- Abstract Thinking/Problem-Solving
- Initiation/Apathy
- **Two validity indexes-**
- Inconsistency
- Infrequency

(*Pearsonassessments,* 2021)

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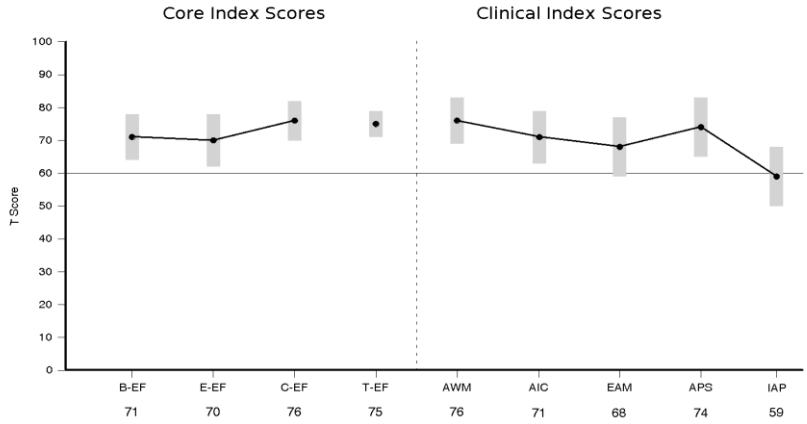
D-REF ADULT CORE AND CLINICAL INDEX SCORE PROFILE



B-EF = Behavioral Executive Functioning; E-EF = Emotional Executive Functioning; C-EF = Cognitive Executive Functioning; T-EF = Total Executive Functioning;
AWM = Attention/Working Memory; AIC = Activity Level/Impulse Control; EAM = Emotional Control/Anger Management; APS = Abstract Thinking/Problem-Solving; IAP = Initiation/Apathy

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CORE INDEX SUMMARY

Index	Raw Score/ Sum of *T* Scores	*T* Score	Percentile Rank	95% Confidence Interval	Descriptive Classification
Behavioral Executive Functioning	39	71	96	64 - 78	Moderate Elevation
Emotional Executive Functioning	27	70	96	62 - 78	Mild Elevation
Cognitive Executive Functioning	66	76	99	70 - 82	Moderate Elevation
Total Executive Functioning	217	75	98	71 - 79	Moderate Elevation

CLINICAL INDEX SUMMARY

Index	Raw Score	*T* Score	Percentile Rank	95% Confidence Interval	Descriptive Classification
Attention/Working Memory	25	76	99	69 - 83	Moderate Elevation
Activity Level/Impulse Control	21	71	96	63 - 79	Moderate Elevation
Emotional Control/Anger Management	19	68	94	59 - 77	Mild Elevation
Abstract Thinking/Problem-Solving	22	74	98	65 - 83	Moderate Elevation
Initiation/Apathy	16	59	81	50 - 68	Average Elevation

Mrs. Sparks sees herself as functioning in the moderate range of difficulty in attention/working memory

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MOST DISTRESSING SYMPTOMS

Item		Rating
1.	I say things before thinking.	Daily
2.	When I'm working on something, I'll get distracted and won't finish what I started.	Weekly
7.	I can't sit still for very long.	Daily
8.	I have trouble completing things.	Weekly
20.	It's hard for me to keep doing boring things.	Weekly

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PERCENTAGE OF DIFFERENT RATINGS BY THE EXAMINEE		
Rating	Percentage	
Seldom/Never	12.8%	
Monthly	17.0%	
Weekly	46.8%	
Daily	23.4%	
Unanswered	0.0%	

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Item		Response	Time Spent on Item (in sec)
1.	I say things before thinking.	Daily	7
2.	When I'm working on something, I'll get distracted and won't finish what I started.	Weekly	7
3.	I get mad easily.	Daily	5
4.	I forget what I'm supposed to do.	Daily	4
5.	I'm not interested in going places.	Monthly	6
6.	I have trouble reading words that I could read before.	Seldom/Never	8
7.	I can't sit still for very long.	Daily	7
8.	I have trouble completing things.	Weekly	4
9.	I don't think before acting.	Monthly	16
10.	I should be watched because I might do things like leave the stove on.	Monthly	8
11.	I can't control my anger.	Weekly	4
12.	I sit around doing nothing.	Monthly	7
13.	I can't help doing things that I shouldn't do.	Seldom/Never	8
14.	I need to listen and pay attention better.	Daily	4
15.	I can't control my crying or laughing.	Seldom/Never	12
16.	I have missed my mouth when eating or drinking.	Seldom/Never	8
17.	I get frustrated when people say I do things wrong.	Monthly	8
18.	I don't feel motivated to do things.	Weekly	7
19.	I have trouble following directions.	Weekly	4
20.	It's hard for me to keep doing boring things.	Weekly	4

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21. People say I'm too hyper.	Weekly	4
22. I get confused when ordering food at a restaurant.	Seldom/Never	6
23. I can't concentrate on something for very long.	Weekly	4
24. I make mistakes because I'm in a hurry.	Monthly	10
25. People say I annoy or irritate them.	Monthly	6
26. I randomly jump from one topic to another when talking.	Weekly	7
27. I have trouble making decisions.	Weekly	3
28. I can't remain quiet when expected.	Weekly	8
29. I get off task when doing things.	Daily	3
30. People tell me to calm down.	Weekly	6
31. I make simple addition or subtraction mistakes even when using a calculator.	Weekly	7
32. I spend a lot of time trying to find things I need.	Weekly	6
33. I take foolish risks.	Seldom/Never	4
34. When I have a lot of things to do, I don't know where to start.	Daily	5
35. People say I talk too much.	Daily	3
36. I have difficulty adjusting to changes in my routine.	Weekly	7

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37. I hurt others' feelings without meaning to.	Weekly	6
38. I have trouble planning things.	Weekly	5
39. I forget to look both ways when crossing a street.	Seldom/Never	7
40. I am disorganized.	Daily	3
41. I mess things up because I don't read the instructions.	Weekly	4
42. My mood changes from happy to sad or mad quickly.	Monthly	6
43. I have a hard time getting started on things.	Weekly	4
44. I make poor decisions when spending money.	Weekly	3
45. Little setbacks make me upset.	Weekly	4
46. I don't get excited about things.	Seldom/Never	6
47. People say I use poor judgement.	Seldom/Never	6
48. I have trouble coming up with ideas to solve problems.	Monthly	4
49. I take risks even when I might get hurt.	Seldom/Never	4
50. I have to be reminded to do basic things like brush my teeth or bathe.	Seldom/Never	6
51. I spend money recklessly.	Monthly	3
52. I lose track of what I'm doing because of noise or other things going on.	Daily	6
53. I argue with others.	Weekly	3
54. I focus on small details and miss the main point.	Seldom/Never	8
55. I try to solve problems the same way, even if it doesn't work.	Monthly	4
56. I get frustrated easily.	Weekly	4
57. I miss meals if they're not prepared for me.	Monthly	5
58. I have trouble multitasking.	Daily	5

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INTERVENTION STRATEGIES

The following interventions are suggestions to consider when planning treatment recommendations for the client. The suggested interventions are derived from the general literature on cognitive rehabilitation and psychotherapy, on evidence-based research of treatment interventions, and/or on the clinical experience of the D-REF Adult author. The specific interventions suggested are based on the client's profile of T scores on the D-REF Adult clinical indexes; however, before deciding on the most appropriate recommended interventions for an individual, incorporate information from other sources as well, including a clinical interview, record review, validity findings, and performance-based cognitive tests.

PLEASE NOTE THAT DREFT WILL CREATE THESE BASED ON TEST RESULTS

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ATTENTION/WORKING MEMORY INDEX
RECOMMENDED INTERVENTION STRATEGIES:

- **Shorten work periods or tasks to coincide with attention span.**
- **Use written reminder notes.**
- **Keep important personal objects (e.g., smartphone, keys) in the same, central location at home.**
- **Place visual reminder cues in helpful locations (e.g., photo of smartphone by the front door).**
- **Break longer tasks into smaller parts.**
- **Ask for clear, concise instructions when assigned tasks.**
- **Write down instructions for longer tasks.**
- **Use a notebook to write down memories and reminders.**
- **Use a daily pill organizer.**
- **Use calendar, reminders, and notifications on digital devices (e.g., smartphone) to remember important tasks and appointments.**
- **Develop routines that are structured and consistent.**
- **Ask to receive assignments one at a time to avoid work overload.**

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ATTENTION/WORKING MEMORY INDEX
RECOMMENDED INTERVENTION STRATEGIES:

- **Keep written to-do lists and cross off each task as it is completed.**
- **Allow extra time to complete difficult tasks.**
- **Use a timer to define periods of uninterrupted work.**
- **Turn off distracting stimuli (e.g., television, stereo) when working on tasks.**
- **Use earplugs or noise-cancelling headphones when working in a noisy environment.**
- **Use an enjoyable activity (e.g., watching a favorite show or sports program) as a reward for staying focused of a difficult task.**
- **Plan a major reward (e.g., having friends over, dining at a nice restaurant, planning a vacation) for maintaining focus on a series of difficult tasks.**

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ATTENTION/WORKING MEMORY INDEX
RECOMMENDED INTERVENTION STRATEGIES:

Consider a referral for individual psychotherapy that provides behavioral strategies to reduce distractibility, counter procrastination, and maintain focus.

Consider a referral to a psychiatrist or general practitioner to evaluate a possible trial of medication to enhance sustained attention.

Avoid self-critical behavior after becoming distracted or procrastinating.

If attending college, apply for assistance and accommodations through the school's learning services program.

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ACTIVITY LEVEL/IMPULSE CONTROL INDEX

- Learn self-monitoring of behavior (e.g., self-talk).
- Reward goal-directed behavior.
- Avoid self-criticizing minor behavioral slip-ups.
- Keep a written log of impulsive behaviors with the goal of reducing their frequency over time.
- Seek out help and supervision in high-risk situations.
- Develop and stick to structured routines for completing tasks.
- Write out the necessary steps to accomplish complex tasks.
- Verbalize the steps while completing tasks.
- Place more importance on accuracy (i.e., reducing the number of errors) than speed when completing tasks.
- Double-check work after completing difficult tasks.
- Practice pausing and thinking before responding in conversations.
- Learn active listening strategies (e.g., paraphrasing what people say).
- Consider having a responsible family member or trustee provide help or oversight of financial management.
- Consider a referral for individual psychotherapy that provides behavioral strategies to reduce impulsive behaviors.
- Consider a referral to a psychiatrist or general practitioner for possible medication management of impulsive behaviors that may be harmful to self or others.

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EMOTIONAL CONTROL/ANGER MANAGEMENT INDEX

- Monitor stress level and anticipate overreactions.
- Use self-talk to reduce frustration.
- Identify common anger-triggering situations and strive to avoid or escape them.
- Learn to label different emotions and reactions to increase self-awareness.
- Practice verbalizing initial emotional reactions before they escalate.
- Use deep breathing exercises at the first signs of stress.
- Use physical exercise to channel frustration and anger in positive ways.
- Learn diffusing techniques, such as identifying and countering catastrophic thoughts.

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EMOTIONAL CONTROL/ANGER MANAGEMENT INDEX

Include meditation and mindfulness exercises (e.g., self-reflection) in daily routine.

Learn to use calming apps (e.g., storytelling, guided meditation) on digital device.

Practice speaking in a calm, nonthreatening manner.

Use a safe, time-out room to vent emotions away from others.

Keep a written log of overreactions with the goal of reducing their frequency over time.

Reward self for increasingly longer periods of emotional stability.

Seek out supportive, calming people when emotions are starting to rise.

Keep one or two supportive individuals on speed dial to call in situations that are starting to escalate.

If possible, avoid socializing with individuals who are often upsetting or irritating.

Make an agreement with family or close friends to audio-record daily conversations in order to increase self-awareness of when and how anger reactions arise.

Consider joining an anger management therapy group.

Consider a referral for individual psychotherapy that provides anger management interventions.

Consider a referral for family therapy with a focus on learning strategies to diffuse emotionally charged situations.

Consider a referral to a psychiatrist or general practitioner for possible medication management of mood swings.

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ABSTRACT THINKING/PROBLEM-SOLVING INDEX

Use a highlighter to mark key ideas in books, instruction manuals, and other documents.

Use reference materials like online dictionaries, searches, and encyclopedias to better understand a subject.

Use sticky notes to formulate and organize conceptual ideas.

Don't rush to use obvious solutions to problems; try to think of new, outside-the-box solutions.

Write down different possible solutions to a problem and rate them in terms of likelihood of working.

Seek out mentors or tutors to give guidance and feedback on difficult tasks.

Use online video tutorials to learn how to complete tasks and solve problems.

Breakdown solutions into smaller steps to achieve them.

Identify areas of disorganization (e.g., paying bills, filing of important papers), and set aside time to learn how to accomplish those tasks in a more efficient and organized manner.

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ABSTRACT THINKING/PROBLEM-SOLVING INDEX

Use weekly or monthly planners to help organize short- and long-term goals.

Consider less obvious motivations and meanings when receiving advice (e.g., from a salesperson).

Find a trustworthy and competent financial advisor to assist with major financial decisions.

If attending college, apply for assistance and accommodations through the school's learning services program.

Consider a referral for individual psychotherapy to improve insight and assist with problem-solving.

Consider a referral for cognitive rehabilitation to learn strategies for enhancing abstract thinking and problem-solving skills.

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ADHD IN CHILDREN

- 3-8% of Children (average 5.3% worldwide). This means 3.7%-5.9 million school-age children in United states alone have ADHD.
- The ratio of males to females with ADHD is 3-4 to 1 children and 2-2.5 to 1 adolescents (and nearly 1.5 to 1 adults).
- This disorder has been identified in every country, ethnic group, and culture in which it has been studied.
- There is no evidence of significant or meaningful difference is prevalence or in the nature of the disorder across ethnic groups.
- 10-34% of those diagnosed of those diagnosed as children or adolescents no longer meet all criteria (particularly those in the hyperactivity dimension) for the diagnosis as adults.
- Also, students who had been taking their prescribed stimulant medication since elementary school did not have an increased risk of illicit stimulant prescription use.

(Barkley, 2022)

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LONG TERM GOALS:

1. Sustain attention and concentration for consistently longer periods of time.
2. Increase the frequency of on-task behaviors.
3. Demonstrate marked improvement in impulse control.
4. Parents and/or teachers successfully utilize a reward system, contingency contract, or token economy to reinforce positive behaviors and deter negative behaviors.
5. Parents set firm, consistent limits and maintain appropriate parent-child boundaries.
6. Develop positive social skills to help maintain lasting peer friendships.

(Jongsma, et al. , 2024)

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SHORT TERM OBJECTIVES:

1. Client and parents describe the nature of the ADHD including specific behaviors, triggers, and consequences.
2. Complete psychological testing to measure the nature and extent of ADHD and/or rule out other possible contributors.
3. Parents and the client demonstrate increased knowledge about ADHD and its treatment.
4. Parents learn and implement Parent Management Training to increase prosocial behavior and decrease disruptive behavior of their child/children.
5. Parents develop and utilize an organized system to keep track of the client's school assignments, chores, and household responsibilities.

(Jongsma, et al. , 2024)

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SHORT TERM OBJECTIVES:

6. Parents develop and utilize an organized system to keep track of the client's school assignments, chores, and household responsibilities.

7. Utilize effective study and test taking skills on a regular basis to improve academic performance.

8. Increase frequency of completion of school assignments, chores, and household responsibilities.

9. Delay instant gratification in favor of achieving meaningful long-term goals.

(Jongsma, et al. , 2024)

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SHORT TERM OBJECTIVES

10. Identify and implement effective problem-solving strategies.

11. Increase the frequency of positive interactions with parents.

12. Identify stressors or painful emotions that an trigger increase in hyperactivity and impulsivity.

13. Identify and list constructive ways to utilize energy.

(Jongsma, et al. , 2024)

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THERAPUETIC INTERVENTIONS FOR CHILDREN

- Thoroughly assess the various stimuli (e.g., situations, people, thoughts) that have triggered the client's ADHD behavior; the thoughts, feelings, and actions that have characterized the child's responses; and the consequences of the behavior (e.g., reinforcements, punishments), toward identifying target behaviors, antecedents, consequences, and the appropriate placement of interventions (e.g., school-based, home-based, peer-based).
- Educate the client's parents and siblings about the symptoms of ADHD.
- Teach the parents how to specifically define and identify problem behaviors, identify their reactions to the behavior, determine whether the reaction encourages or discourages the behavior, and generate alternatives to the problem behavior. (EXAMPLE: PARENTS REPORTS THAT A CHILD IS DISRESPECTFUL)

(Jongsma, et al. , 2024)

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THERAUPETIC INTERVENTIONS FOR CHILDREN

- Teach parents about the possible functions of the ADHD behavior (e.g., avoidance, attention, to gain a desire object/activity, regulate sensory stimulation); how to test which function(s) is being served by the behavior, and how to use parent training methods to manage the behavior.
- Assist the parents in developing and implementing an organizational system to increase the client's on-task behaviors and completion of school assignments, chores, or household responsibilities through the use of calendars, charts, notebooks, and class syllabi.
- Assist the parents in developing a routine schedule to increase the client's positive behaviors with school, household, or work-related responsibilities.
- Teach the client more effective study skills (e.g., clearing away distractions, studying in quiet places, and scheduling breaks in studying).
- Teach the client more effective test-taking strategies (e.g., reviewing material regularly, reading directions twice, and rechecking work).

(Jongsma, et al. , 2024)

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THERAPEUTIC INTERVENTIONS FOR CHILDREN

- Assist the parents in increasing structure to help the client learn to delay gratification for longer term goals (e.g., completing homework or chores before playing).
- Explore for periods of time when the client demonstrated good impulse control and engaged in fewer disruptive behaviors; process his/her responses and reinforce positive coping mechanisms that they used to deter impulsive or disruptive behaviors.
- Encourage the parents to spend 10 to 15 minutes daily of one-on-one time with the client to create a closer parent-child bond; allow the client to take the lead in selecting the activity or task. (Jongsma, et al. , 2024)
- TAKE BACK OR REDO PHRASE- (Saline, 2020)

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THERAPUETIC INTEREVENTION FOR CHILDREN

- BEING ACTIVE AND NOT REACTIVE: TEACHING PARENTS TO HAVE PLANNED RESPONSES AND HOW TO SELF MANAGE THEIR OWN EMOTIONS AND FEELINGS.
- Teach kids to use “WAIT NOW” to help them reflect on what they are saying before or even once they’ve started talking. Encourage them to: Pause, ask themselves “Why Am I Talking Now?” and then see if they need to say what’s on their mind. Parents can do this too. (Saline, 2020)
- VISUAL CUES-LIST OF CHORES ON WHITEBOARD(I.E. THE STEPS TO COMPLETE THE CHORE)OR A LIST OF THE FAMILY RULES. (Saline, 2020)
- USING TIMERS-PREFERABLY ONES THAT MAKE TIME REAL WITH EITHER COLORS (RED/YELLOW/GREEN)
- MORNING MADNESS: Work with kids to create a list, flow chart, or pictures with no more than five simple tasks to accomplish before going to school. Instead of giving reminders and arguing about what needs to get done, refer them to the list. You’ll reduce unpleasant arguments. (Saline, 2020)

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THERAPUETIC INTEREVENTION FOR CHILDREN

- WINNS: This is a skill that can help a child with ADHD when they get flooded with Big feelings and struggle to express verbally what they are feeling. You can ask the child to complete the WINNS: "What I need Now is..." (Saline, 2020)
- Using "How" instead of "Why." This reduces shame in approaching children and adults. (example: "Why did you do that like that?" vs. "How did you come to that choice?")
- Teaching parents about to use short term gains and "rewards" to improve and continue positive behaviors.
- Teaching parents how to put the rewards after the undesirable tasks. Example: not being on devices until chores are completely.
- Teaching parents how to communicate with the ADHD child by making sure that they have the child's attention. This could include touching them gently on the shoulder, making sure that you have eye contact, and asking them to repeat it back to you if necessary.

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PARENTING TIPS FOR ADHD

1. ***Focus on the positives of the ADHD child***. For example, if the child is good at math or drawing, reinforce those successes and advance the development of these talents or skills.
2. ***Remember that this is a disorder.*** There are a lot of stigmas attached to ADHD because you can't see inside the brain, only the outward behaviors.
3. ***Be a shepherd, not an engineer.*** This reinforces the idea that ADHD isn't something that can be trained out of someone but something that has to be accepted and learned to be coped with. There is no cure for ADHD but there are coping skills that can be learned to help the person have a successful life.
4. ***Get your priorities straight.*** The example Barkley gives is that cleaning the house on a school day is not going to help your child's overall development if the goal is to improve school functioning and performance.
5. ***Mindful parenting.*** This is referred to as being there mentally and being aware. Being attentive to them and your own feelings is essential.
6. ***Promote your child's self-awareness and accountability***. Give feedback that is immediate, frequent, and includes praise. In addition to providing consequences that make sense. This is also to help the child be able to move to self-reporting and accountability.

Barkley, R. A. (2022). *Treating ADHD in children and adolescents what every clinician needs to know*. GUILFORD.

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PARENTING TIPS FOR ADHD

7. Touch more, reward more, and talk less. This engages your ADHD child in the ways that they need to process the information that you are trying to convey while parenting.

8. Make time real. Use visual cues like a timer that moves and shifts from green, yellow, to red to represent time moving. Since time management may be difficult for the ADHD child to understand.

9. Working memory isn't working. Individuals with ADHD do not have good working memory. Practice using visual cues and reminders to help the child remember certain things.

10. Get organized. Help your child be organized by being the prefrontal cortex for them. You could get them bins to make clean up easy or structure that is easy to follow to help them build these skills.

11. Make problem solving external and concrete. Children with ADHD can not influence mental information. Parents can work on ways to make it physical or minimize moving parts to help them learn how to problem solve.

12. Be proactive. Be active and not reactive with your child. Plan for difficult situations at home and away in different environments. If you need to verbally review the rules to your child; have them repeat them back to you, so you know they heard them. In addition, you can add rewards to following the rules and the consequences that will happen if they are not followed. Remember to establish the consequences without shaming the child and derailing the self-concept of the child (Barkley 2022 pp. 125-126).

Barkley, R. A. (2022). *Treating ADHD in children and adolescents what every clinician needs to know*. GUILFORD.

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ADHD IN ADOLESCENTS

- 4-7% of Adolescents have ADHD.
- Studies find that adolescents with ADHD engage in a riskier pattern of sexual behavior and activity than do typical teens.
- Teens with ADHD are 10 times more likely to get pregnant or, if male to get their girlfriends pregnant (17 vs 4%).
- They are more likely to have their children placed for adoption or given to their parents to raise.
- Recent studies of girls with ADHD followed to adulthood showed that they were far more likely than other girls to experience sexually compromising situations and to be victimized or assaulted sexually than typical girls of the same age.
- ADHD adolescents are 30% behind their chronological age in their self-regulation.

(Barkley, 2022)

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ADHD IN ADOLESCENTS

- It is vital for adolescents to be taking the stimulant medication if they are going to be driving. It is comparative to drunk driving if un-medicated.
- The typical cause of most crashes is driver inattention, especially at higher speeds, followed by being highly impulsive. If a teen has ADHD, magnifify those risk by 2-5 times.
- Females with ADHD, especially in late adolescences, are 3.6 more times likely than females without ADHD to suffer from eating pathology, specifically impulsive eating and binge eating, and 5.6 times more likely to have bulimia, such that 15-20% qualify for a diagnosis of an eating disorder.
- Up to 62% of children with ADHD and 91% of those with comorbid ODD experience physical or emotional trauma, with rates of physical abuse estimated to be 3 times greater (14.3 vs. 4.5%) than typical children.
- (Barkley, 2022)

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LONG TERM GOALS

1. Sustain attention and concentration for consistently longer periods of time and increase the frequency of on-task behaviors.
2. Demonstrate marked improvement in impulse control.
3. Regularly take medication as prescribed to decrease impulsivity, hyperactivity, and distractibility.
4. Parents and/or teachers successfully utilize a reward system, contingency contract, or token economy to reinforce positive behaviors and deter negative behaviors.
5. Parents set firm, consistent limits and maintain appropriate parent-child boundaries.

(Jongsma, et al. , 2024)

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SHORT TERM OBJECTIVES:

1. Client and parents describe the nature of the ADHD including specific behaviors, triggers, and consequences.
2. Complete psychological testing to measure the nature and extent of ADHD and/or rule out other possible contributors.
3. Parents and the client demonstrate increased knowledge about ADHD and its treatment.
4. Parents develop and utilize an organized system to keep track of the client's school assignments, chores, and household responsibilities.
5. Utilize effective study and test taking skills on a regular basis to improve academic performance.
6. Increase frequency of completion of school assignments, chores, and household responsibilities.
7. Delay instant gratification in favor of achieving meaningful long-term goals.
8. Identify and implement effective problem-solving strategies.
9. Increase the frequency of positive interactions with parents.
10. Increase the frequency of socially appropriate behaviors with siblings and peers.
11. Increase verbalizations of acceptance of responsibility for misbehavior.
12. Identify stressors or painful emotions that trigger an increase in hyperactivity and impulsivity.
13. Identify and list constructive ways to utilize energy. (Jongsma, et al. , 2024)

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THERAPEUTIC INTERVENTIONS

- Thoroughly assess the various stimuli (e.g., situations, people, thoughts) that have triggered the client's ADHD behavior; the thoughts, feelings, and actions that have characterized his/her responses; and the consequences of the behavior (e.g., reinforcements, punishments) toward identifying target behaviors, antecedents, consequences, and the appropriate placement of interventions (e.g., school-based, home-based, peer-based).
- Educate the client and/or client's parents about the signs and symptoms of ADHD.
- Discuss with the client and/or parents the various treatment options for ADHD (e.g., behavioral parent training, classroom-based behavioral management programs, peer-based programs, medication), discussing risks and benefits to fully inform the parents' decision-making.
- Explain how parent and child behavioral interactions can reduce the frequency of impulsive, disruptive, and negative attention-seeking behaviors and increase desired prosocial behavior through prompting and reinforcing positive behaviors as well as use of clear instruction, time out, and other loss-of-privilege practices for problem behavior
- Teach the parents how to specifically define and identify problem behaviors, identify their reactions to the behavior, determine whether the reaction encourages or discourages the behavior, and generate alternatives to the problem behavior
- Teach parents about the possible functions of the ADHD behavior (e.g., avoidance, attention, to gain a desired object/activity, regulate sensory stimulation); how to test which function(s) is being served by the behavior, and how to use parent training methods to manage the behavior.
- Assist the parents in developing and implementing an organizational system to increase the client's on-task behaviors and completion of school assignments, chores, or household responsibilities through the use of calendars, charts, notebooks, and class syllabi
- Assist the parents in developing a routine schedule to increase the client's positive behaviors with school, household, or work-related responsibilities.
- Teach the client more effective study skills (e.g., clearing away distractions, studying in quiet places, and scheduling breaks in studying).
- Teach the client more effective test-taking strategies (e.g., reviewing material regularly, reading directions twice, and rechecking work).

(Jongsma, et al. , 2024)

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THERAPEUTIC INTERVENTIONS

- Explore for periods of time when the client demonstrated good impulse control and engaged in fewer disruptive behaviors; process his/her responses and reinforce positive coping mechanisms that he/she used to deter impulsive or disruptive behaviors.
- Instruct the parents to observe and record three to five positive behaviors by the client in between therapy sessions; reinforce positive behaviors and encourage him/her to continue to exhibit these behaviors.
- Encourage the parents to spend 10 to 15 minutes daily of one-on one time with the client to create a closer parent-child bond. Allow the client to take the lead in selecting the activity or task.
- Explore and identify stressful events or factors that contribute to an increase in impulsivity, hyperactivity, and distractibility.
- Explore possible stressors, roadblocks, or hurdles that might cause impulsive and acting-out behaviors to increase in the future.
- Identify coping strategies (e.g., "stop, look, listen, and think," guided imagery, utilizing "I messages" to communicate needs) that the client and his/her family can use to cope with or overcome stressors, roadblocks, or hurdles.
- Give a homework assignment where the client lists the positive and negative aspects of his/her high energy level; review the list in the following session and encourage him/her to channel energy into healthy physical outlets and positive social activities (Jongsma, et al. , 2024)

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THERAPEUTIC INTERVENTIONS

- Teach the client mediational and self-control strategies (e.g., "stop, look, listen, and think") to delay the need for instant gratification and inhibit impulses to achieve more meaningful, longer-term goals
- Assist the parents in increasing structure to help the client learn to delay gratification for longer term goals
- Teach older clients effective problem-solving skills through identifying the problem, brainstorming alternative solution options, listing pros and cons of each solution option, selecting an option, implementing a course of action, and evaluating the outcome (Jongsma, et al. , 2024)
- Learning how to utilize visual cues
- Emotion regulation skills

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THERAPEUTIC INTERVENTIONS

RAIN COPING SKILL: Emotion regulation skill

Recognize what is going on.

• Label with curiosity the feeling that you are experiencing.

Allow and accept the experience to be there, just as it is.

• This does not mean that you have to like the feeling.

• Just see if you can accept that it is a feeling you are having now and that it is only temporary.

Investigate with kindness.

• Notice if you are feeling anything in your body like tense muscles, a pit in your stomach, your heart racing, or shallow breathing. • Notice if you have any thoughts connected to the feeling.

Natural awareness and non-identity.

• Try to not personalize.

• Remember that it is a temporary feeling. It is a wave of emotions, and like all emotions, it will come and go

(Cahill, 2019)

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ADHD IN ADULTS

- ADHD is associated with increased risk for health issues.
- Women in treatment for binge-eating disorder or bulimia are 4 times more likely to have to ADHD.
- Patients with eating pathology and ADHD are likely to have more severe eating problems and to be less responsive to efforts at self-change or interventions for weight control than are patients who don't have ADHD.
- Sleeping problems and disorders are more than twice as common in people with ADHD (52-70%) as compared with typical peers (21-27%).
- Teens & Adults with ADHD report an earlier age at first sexual intercourse, a lower likelihood of employing contraception, a greater number of sex partners, 4 times the risk for sexually transmitted disease, and 8-10 times the risk for teenage pregnancy.
- Poorer nutrition/2.8-3.3 times more likely to develop type 2 diabetes.
- Increased risk for coronary heart disease.
- Adults with ADHD have been found to have double to risk for dementia in later life, as well as various disorders of the basal ganglia and cerebellum, such as Parkinson's disease.
- Higher risk for obesity, diabetes, smoking, sleep disorders, level of high-density lipid cholesterol, earlier age of parenthood, risk for rheumatoid arthritis, earlier menopause, and others.

(Barkley, 2022)

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LONG TERM GOALS

1. Reduce impulsive actions while increasing concentration and focus on low-interest activities.
2. Minimize ADHD behavioral interference in daily life.
3. Accept ADHD as a chronic issue.
4. Sustain attention and concentration for consistently longer periods of time.
5. Achieve a satisfactory level of balance, structure, and intimacy in personal life.

(Jongsma, et al. , 2024)

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SHORT TERM OBJECTIVES:

1. Describe past and present experiences with ADHD including its effects on functioning.
2. Cooperate with and complete psychological testing.
3. Identify the current specific ADHD behaviors that cause the most difficulty.
4. List the negative outcomes of the ADHD problematic behavior.
5. Increase knowledge of ADHD and its treatment.
6. Learn and implement organization and planning skills.

(Jongsma, et al. , 2024)

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SHORT TERM OBJECTIVES:

7. Learn and implement skills to reduce the disruptive influence of distractibility.

8. Identify, challenge, and change self-talk that contributes to maladaptive feelings and actions.

9. Acknowledge procrastination and the need to reduce it.

10. Learn and implement skills to reduce procrastination.

11. Combine skills learned in therapy into a new daily approach to managing ADHD.

(Jongsma, et al. , 2024)

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THERAPUETIC INTERVENTIONS FOR ADULTS

- Assist the client in identifying the current specific behaviors that cause them the most difficulty functioning as part of identifying treatment targets (i.e., a functional analysis).
- Ask the client to have extended family members and close collaterals complete a ranking of the behaviors they see as interfering the most with his/her daily functioning (e.g., mood swings, temper outbursts, easily stressed, short attention span, never completes projects).
- Assign the client to make a list of negative outcomes that they has experienced or that could result from a continuation of the problematic behavior; process the list.
- Educate the client about the signs and symptoms of ADHD and how they disrupt functioning through the influence of distractibility, poor planning and organization, maladaptive thinking, frustration, impulsivity, and possible procrastination.

(Jongsma, et al. , 2024)

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THERAPUETIC INTERVENTIONS FOR ADULTS

- Teach the client organization and planning skills including the routine use of a calendar and daily task list.
- Develop with the client a procedure for classifying and managing mail and other papers.
- Teach the client problem-solving skills (i.e., identify problem, brainstorm all possible options, evaluate the pros and cons of each option, select best option, implement a course of action, and evaluate results) as an approach to planning; for each plan, break it down into manageable time-limited steps to reduce the influence of distractibility. (Jongsma, et al. , 2024)
- "Chunk it"-breaking down problems or tasks into smaller achievable steps.
- 20% is okay-decreasing the negative feedback loop of perfectionism or non completion of tasks.
- Now & Not Now concept.- Now only exists in the ADHD brain and later doesn't.

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THERAPUETIC INTERVENTIONS FOR ADULTS

- Daily tasks list
- 15 minute clean up routine
- Learning how to use alarms & timer to help short term memory and task completion. (example: setting an alarm or reminder to transfer the laundry.
- Thought Bubbles
- Using ADHD specific CBT. "Gentle CBT" with heavy on the skills.
- Using EMDR to break down shame-based messages/trauma/stressful incidents as well as Slow Bilateral to reinforce positives.
- Improvement of communication with others example of spouses, friends, family, etc. (being able to give and receive feedback)
- Learning how to change the environment to work with ADHD individual and not against them.
- Exporting tasks if possible

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ADHD MYTHS

MYTH:

Bad parenting causes ADHD

Sugar & Red Dye causes ADHD

Screens cause ADHD

FACTS:

Despite numerous claims to the contrary, no scientific research has found that any of the following cause ADHD:

- Social factors, such as parenting or educational environment
- Dietary substances, such as sugar or food preservatives and additives
- Excessive TV watching, computer use, or video game playing (Barkley, 2022)

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ADHD MYTHS

MYTHS:

1. Stimulant drugs are dangerous and should not be taken by anyone, especially children.

Fact: Misinformation in the 1980's & 1990's was widely spread and created a long-term misunderstanding of this.

2. Stimulants make people "high," as illegal drugs do, and are addictive.

Fact: This only happens is people crush the drug and inhale it nasally as a powder, inject it into a blood vessel, or take exceptionally high doses.

3. Children who take stimulants will be addicts later in life.

Fact: Many studies found that taking stimulants during childhood did not predispose children with ADHD to an increased risk of substance use or abuse as teenagers. In fact, some research found that adolescents with ADHD who had remained on their medication during the teen years had a significantly lower likelihood of substance use or abuse than did children with ADHD who were not taking medications during adolescents.

(Barkley, 2022)

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ADHD MYTHS

MYTHS:

4. Stimulant medication stunt children's growth.

Fact: A child's eventual adult height or skeletal size is not likely to be affected by taking the medication. The effects on a child's weight are also likely to be minimal, resulting in a failure to gain 1 or 2 pounds during the initial year of treatment. There is no evidence long term of weight/height decrease from these medications and children don't have to take medication breaks(not taking the medication on weekends or summers) if the benefits outweighs the cons of not having the medication.

5. Stimulants do not result in lasting benefits to a child's academic achievement

Fact: What stimulants do is help the child with ADHD show what they know during performance of school assignments by improving the child's attention span, concentration, resistance to distraction, and thoughtful, reflective behavior. They also make the child more available to learn what is being taught in school by reducing the child's off-task, disruptive, and otherwise inattentive behavior and improving their self-regulation. This can also improve peer relationships and self-esteem in the long-term.

(Barkley, 2022)

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ADHD MYTHS

MYTHS:

6. Stimulants cause sudden death in children and adults.

Facts: The Food and Drug Administration when investigating deaths that are reported to be linked to taking stimulant medication for ADHD are found to have no link between the sudden death and the stimulant medication.

7. People who take ADHD medications long term will have an actual physical tolerance to it.

Facts: Some individuals will report that their medications seem less effective 3-6 months after starting their treatment. This usually requires adjusting the dose or, sometimes, changing the delivery system or even a different medication. Clinically, we sometimes see people complaining that their medication is not working well; however, further information in these cases show them going through unusually stressful or demanding periods in their lives that may exacerbate their ADHD symptoms and make it more difficult for their usual dose to provide adequate treatment.

(Barkley, 2022)

PLEASE REMEMBER YOU DO NOT HAVE TO BE AN EXPERT AT MEDICATION AND CAN ENCOURAGE YOUR CLIENTS TO FIND DOCTORS THAT TRAINED IN TREATING ADHD AND UP TO DATE IN NEWER RESEARCH. YOU CAN ALSO HELP YOUR CLIENT ADVOCATE FOR THEMSELVES.

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FACTS ABOUT ADHD & EF

- Women going through menopause may have increased difficulties with EF due to a decrease in estrogen production. Using hormone therapy during menopause can help improve executive function performance.
- Experiencing chronic stress can lead to EF impairment, particularly with regard to cognitive flexibility and working memory.
- Acute cannabis (marijuana) use leads to issues with attention and memory, while heavy use leads to difficulties with cognitive flexibility, perseveration, and difficulty with shifting and sustaining attention.
- Methamphetamine use leads to impaired working memory, delayed recall, and slowed processing speed.
- Users of 3,4-methylenedioxymethamphetamine (MDMA) experience a delay in verbal learning, recall, and distraction, as well as difficulty in paying attention to tasks and less efficiency in completing tasks.
- Cocaine use leads to impairments in memory, reaction time, attention, learning, and cognitive flexibility. One month of abstinence from cocaine was found to improve EF performance, particularly in working memory performance
- Heroin use leads to difficulties with impulse control and selective processing.
- The more severe the drug use, the more severe the impact on EF. Moreover, the effects of these drugs on EF can be long-lasting.

(SARKIS, 2018)

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ADHD & ADDICTION

- People with executive dysfunction are more likely to abuse alcohol and other drugs, including caffeine, nicotine, alcohol, marijuana, cocaine, and even prescription drugs.
- In fact, one in five adults with ADHD has experienced substance abuse. There is also a much higher rate of executive dysfunction, particularly ADHD, among addicts than in the general population
- Individuals with EF issues also start using drugs at an earlier age and have more intense use than those without EF issues.
- It is also more difficult for people with EF difficulties to quit using substances and then stay abstinent.
- Please remember that ADHD is low dopamine, and the brain will constantly seek out what it is not getting. A client will try to find a way to raise those low levels, whether consciously or unconsciously.
- Additionally, the stress of having EF difficulties can cause individuals to turn to substances as a means by which to self-soothe and relieve their difficulties. For those with EF difficulties, using substances may lead them to feeling as if their brain is functioning “normally” for a brief period of time. However, those effects do not last, and dependence can lead to withdrawal symptoms when they try to stop.

(Sarkis, 2018)

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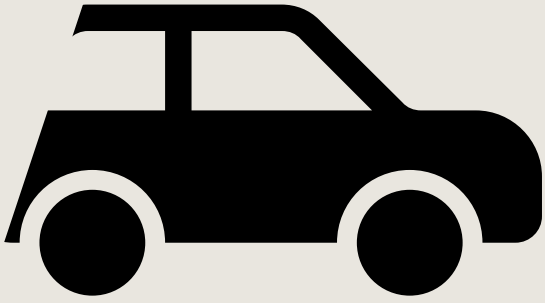
DRIVING WITH ADHD

Driving takes executive functioning. It involves time management, planning, emotion regulation, and forethought.

- One study found that young adults with ADHD taking stimulant medication had significantly improved driving performance on a simulator compared to a group that was taking a placebo.
- In addition, 80% of subjects who were taking stimulant medications reduced their ADHD rating scale scores by at least 30%.
- If a client is not taking stimulant medication, they run the risk of having increased collisions and hazard-response time on a driving simulator compared to when they are on their medication.
- In addition, a study found that individuals with ADHD who texted or talked on their cell phone while driving in a simulator had significantly greater driving impairment than their non-ADHD counterparts who engaged in the same activities
- There are apps that will prohibit your client from texting while the phone senses driving movement.

(Barkley, 2022)



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RELIABLE SOURCES OF INFORMATION

- There is a lot of misinformation about ADHD.
- This has been an issues even before the 80's & 90's.
- Resources and Information for ADHD should always be less than 10 years old. Should be able to provide research for why.
- ADHD can't be cured.
- Anything that claims to solve or cure ADHD (particularly a supplement or vitamin) is false.

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THANK YOU

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